

Easy Series Automation and Control Essentials Catalog 2025

Everything you need for your fit-for-purpose control panels

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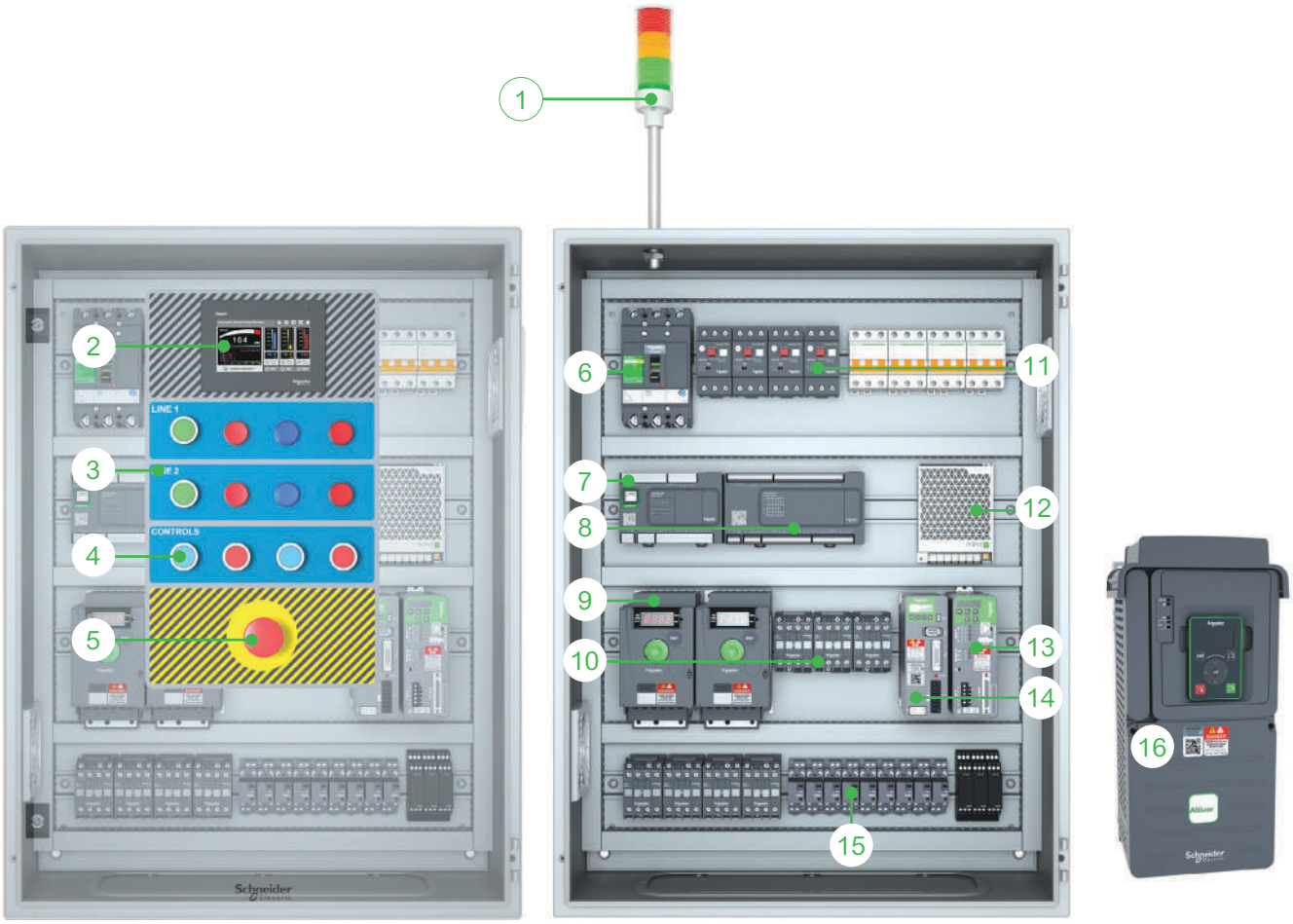


The Essentials for your control panels

Within this catalog you'll find all the components you need to deliver high core performance focused industrial control panels and machines.

The catalog will help you build your fit-for-purpose equipment faster and boost the efficiency of your industrial automation business.

New 2025 product highlights



1 Easy Harmony XVG Tower Light

2 Easy Harmony ET6 Touch screen panel

3 Harmony Customizable Legend Panel

4 Easy Harmony XA2 Pushbuttons

5 Easy Harmony XA2 Emergency Switching off Pushbuttons

6 EasyPact CVS Protection of Distribution System

7 Easy Modicon M200 Logic Controller

8 Easy Modicon M100 Logic Controller

9 Easy Altivar ATV 310 Variable Speed Drives

10 Easy TeSys Contactor

11 Easy TeSys Motor Protection Circuit Breaker

12 Easy Modicon ABL2 Power Supply

13 Easy Lexium 26 Servo

14 Easy Lexium 16 Servo

15 Easy Harmony RXM Electromechanical Relays

16 Easy Altivar ATV 610 Variable Speed Drives

Make your everyday work smoother and easier

As a machine builder or panel builder, you need a reliable source of products to deliver high core performance focused equipment and services on time.

When working with Schneider, you've go that covered.

See for yourself!

Count on a reliable partner for your business

With Schneider Electric, a world leader in automation and control, you get reliable, robust, and affordable products for you and your customers.

Our global network of local distributors ensures high product availability and quick delivery times. So you can easily meet your deadlines.

When just enough is just right!

Save time on component selection with this catalog of automation and control essentials. Use our handy online selectors and configurators to easily find the best solution for your specific application and all the technical information you need.

Our tools help machine builders and panel builders improve the efficiency of their everyday work and build fit-for-purpose equipment with high core performance quicker.

Take advantage of learning opportunities

Gain access to our diverse learning resources, providing practical knowledge and tips, and open new opportunities for your business.

Explore the manuals, tutorials, “how to” videos, and online courses to broaden your skills and make your daily work faster and simpler.





Get all the products you need from a distributor close to you

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01. Easy Harmony control and signaling

Easy Harmony XB2

Ø 22 mm modular metal push buttons, selector switches, emergency stops, pilot lights, joysticks and buzzers.



- Robustness
- Full metal collar and bezel for shock and impact endurance
- Anti-loosening screws for secure fix and grounding contact to panel
- Screw mounted contacts
- IP65, IP66
- Durability: 3M (mechanical), 1M (electrical)

The Easy Harmony XB2 series of Ø 22mm modular metal control units are robust, reliable, flexible and simple to install. Just enough solution for most industrial control and signaling applications, with the added strength.

Adapted to your applications, segments and operating environments

Material working | Packaging | Pumping | Consumer packaged goods | Water & waste water | Material handling



XB2BA42C



XB2BL31C



XB2BA3351C



XB2BP21C

Spring return pushbuttons, unmarked

Type of push	Contact NO	Contact NC	Color of push	Reference for black bezel	
Complete units - Screw clamp terminal connections					
Flush	1	–	White	**XB2BA11C**	(ZB2BZ101C + ZB2BA1C)
	1	–	Black	**XB2BA21C**	(ZB2BZ101C + ZB2BA2C)
	1	–	Green	**XB2BA31C**	(ZB2BZ101C + ZB2BA3C)
	1	–	Yellow	**XB2BA51C**	(ZB2BZ101C + ZB2BA5C)
	1	–	Blue	**XB2BA61C**	(ZB2BZ101C + ZB2BA6C)
	–	1	Red	**XB2BA42C**	(ZB2BZ102C + ZB2BA4C)
Projecting push	1	–	Green	**XB2BL31C**	(ZB2BZ101C + ZB2BL3C)

Spring return pushbuttons, marked

Flush	1	–	Green	**XB2BA3311C**	(ZB2BZ101C + ZB2BA331C)
	1	–	Black	**XB2BA3351C**	(ZB2BZ101C + ZB2BA335C)
	1	–	White	**XB2BA3341C**	(ZB2BZ101C + ZB2BA334C)
	–	1	Red	**XB2BA4322C**	(ZB2BZ102C + ZB2BA432C)

Booted pushbuttons

Type of push	Contact NO	Contact NC	Color of push	Reference for black bezel	
Complete units - Screw clamp terminal connections					
Spring return	1	–	Black	**XB2BP21C**	(ZB2BZ101C+ZB2BP2C)
	1	–	Green	**XB2BP31C**	(ZB2BZ101C+ZB2BP3C)
	–	1	Red	**XB2BP42C**	(ZB2BZ102C+ZB2BP4C)

1



XB2BC51C

Mushroom head pushbuttons

Type of push	Contact NO	Contact NC	Color of push	Diameter Ø (mm)/in.	Reference for black bezel	
Complete units - Screw clamp terminal connections						
Spring return	1	–	Black	40/*1.575*	**XB2BC21C**	(ZB2BZ101C+ZB2BC2C)
	1	–	Green	40/*1.575*	**XB2BC31C**	(ZB2BZ101C+ZB2BC3C)
	1	–	Yellow	40/1.575	**XB2BC51C**	(ZB2BZ101C+ZB2BC5C)
	–	1	Red	40/*1.575*	**XB2BC42C**	(ZB2BZ102C+ZB2BC4C)
	1	–	Black	60/*2.362*	**XB2BR21C**	(ZB2BZ101C+ZB2BR2C)



XB2BT42C

Emergency switching off pushbuttons

Type of push	Contact NO	Contact NC	Color of push	Diameter Ø (mm)/in.	Reference for black bezel	
Complete units - Screw clamp terminal connections						
Push-pull	–	1	Red	40/*1.575*	**XB2BT42C**	(ZB2BZ102C+ZB2BT4C)
Turn to release	–	1	Red	30/*1.181*	**XB2BS442C**	(ZB2BZ102C+ZB2BS44C)
				40/1.575	**XB2BS542C**	(ZB2BZ102C+ZB2BS54C)
				60/*2.362*	**XB2BS642C**	(ZB2BZ102C+ZB2BS64C)



XB2BS8442C

Emergency stop pushbuttons

Type of push	Contact NO	Contact NC	Color of push	Diameter Ø (mm)/in.	Reference for black bezel	
Complete units - Screw clamp terminal connections						
Push-pull	–	1	Red	40/*1.575*	**XB2BT842C**	(ZB2BZ102C+ZB2BT84C)
Turn to release	–	1	Red		**XB2BS8442C**	(ZB2BZ102C+ZB2BS844C)



XB2BD21C

Selector switches, with standard handle or with long handle

Type of handle	Contact NO	Contact NC	Positions Number	Positions Type	Reference for black bezel	
Standard handle, black	1	–	2 - stay put		**XB2BD21C**	(ZB2BZ101C + ZB2BD2C)
	1	1			**XB2BD25C**	(ZB2BZ105C + ZB2BD2C)
	1	–	2- spring return		**XB2BD41C**	(ZB2BZ101C + ZB2BD4C)
	1	1			**XB2BD45C**	(ZB2BZ105C + ZB2BD4C)
	2	–	3-stay put		**XB2BD33C**	(ZB2BZ103C + ZB2BD3C)
	2	–	3- spring return from 2 sides		**XB2BD53C**	(ZB2BZ103C + ZB2BD5C)
	2	–	3- spring return from 1 side		**XB2BD73C**	(ZB2BZ103C + ZB2BD7C)
Long handle	1	–	2 - stay put		**XB2BJ21C**	(ZB2BZ101C + ZB2BJ2C)
	1	1			**XB2BJ25C**	(ZB2BZ105C + ZB2BJ2C)
	2	–	3 - stay put		**XB2BJ33C**	(ZB2BZ103C + ZB2BJ3C)
	2	–	3- spring return from 2 sides		**XB2BJ53C**	(ZB2BZ103C + ZB2BJ5C)



XB2BJ21C

Key selector switches

Type of push	Contact		Positions		Reference for black bezel
	NO	NC	Number	Type	
Complete units - Screw clamp terminal connections					
Key	1	–	2-stay put, 1 side pull out		**XB2BG21C** (ZB2BZ101C + ZB2BG2C)
	1	1			**XB2BG25C** (ZB2BZ105C + ZB2BG2C)
	1	–	2-stay put, 2 side pull out		**XB2BG41C** (ZB2BZ101C + ZB2BG4C)
	1	1			**XB2BG45C** (ZB2BZ105C + ZB2BG4C)
	1	–	2-spring return,1 side pull out		**XB2BG61C** (ZB2BZ101C + ZB2BG6C)
	1	1			**XB2BG65C** (ZB2BZ105C + ZB2BG6C)
	2	–	3- stay put, middle pull out		**XB2BG33C** (ZB2BZ103C + ZB2BG3C)
	2	–	3- stay put, 2 sides pull out		**XB2BG53C** (ZB2BZ103C + ZB2BG5C)
	2	–	3- stay put, 3 sides pull out		**XB2BG03C** (ZB2BZ103C + ZB2BG0C)



XB2BG21C

Illuminated pushbuttons with integral LED

Type of push	Contact		Color of push	Supply voltage V	Reference for black bezel
	NO	NC			
Complete units - Screw clamp terminal connections					
Flush push	1	–	White	24 ⎓	**XB2BW31B1C** (ZB2BWB11C + ZB2BW31C)
			Green		**XB2BW33B1C** (ZB2BWB31C + ZB2BW33C)
			Red		**XB2BW34B1C** (ZB2BWB41C + ZB2BW34C)
			Orange		**XB2BW35B1C** (ZB2BWB51C + ZB2BW35C)
			Blue		**XB2BW36B1C** (ZB2BWB61C + ZB2BW36C)
	1	–	White	220-230 ∿	**XB2BW31M1C** (ZB2BWM11C + ZB2BW31C)
			Green		**XB2BW33M1C** (ZB2BWM31C + ZB2BW33C)
			Red		**XB2BW34M1C** (ZB2BWM41C + ZB2BW34C)
			Orange		**XB2BW35M1C** (ZB2BWM51C + ZB2BW35C)
			Blue		**XB2BW36M1C** (ZB2BWM61C + ZB2BW36C)



XB2BW31B1C

Joystick controllers

Type of push	Contact		Description	Reference for black bezel
	NO	NC		
Complete units - Screw clamp terminal connections				
Spring return	1	–	2-direction	**XD2PA22CR**
	1	–	4-direction	**XD2PA24CR**
Spring return witrhout	–	1	2-direction	**XD2PA12CR**
	–	1	4-direction	**XD2PA14CR**



XD2PA12CR

Annunciators

Type of push	Supply voltage V	Color of push	Reference for black bezel
Complete units - Screw clamp terminal connections			
Non-illuminated 90dB	24 ⎓ - 50/60 Hz	Black	**XB2BSBC**
	220…230 ∿ - 50/60 Hz		**XB2BSMC**
Illuminated 90dB	24 V ⎓ - 50/60 Hz	Red	**XB2BSB4LC**
	220…230 V ∿ - 50/60 Hz		**XB2BSM4LC**



XB2BSB4LC

1



ZB2BA5C

Pushbuttons with flush push, unmarked

Type of push	Color of push	Reference for black bezel
Heads only		
Spring return	White	**ZB2BA1C**
	Black	**ZB2BA2C**
	Green	**ZB2BA3C**
	Red	**ZB2BA4C**
	Yellow	**ZB2BA5C**
	Blue	**ZB2BA6C**



ZB2BA334C

Pushbuttons with flush push, marked

Spring return	Green	**ZB2BA331C**
	Black	**ZB2BA335C**
	White	**ZB2BA334C**
	Red	**ZB2BA432C**



ZB2BL3C

Pushbuttons with projecting push, unmarked

Type of push	Color of push	Reference for black bezel
Heads only		
Spring return	Green	**ZB2BL3C**
	Red	**ZB2BL4C**

Mushroom pushbutton heads

Type of push	Color of push	Diameter Ø (mm)/*in.*	Reference for black bezel
Heads only			
Spring return	Black	40/*1.575*	**ZB2BC2C**
	Green		**ZB2BC3C**
	Red		**ZB2BC4C**
	Yellow		**ZB2BC5C**
	Black	60/*2.362*	**ZB2BR2C**



ZB2BC5C



ZB2BT4C

Emergency switching off heads

Type of push	Color of push	Push Ø (mm)/*in.*	Reference for black bezel
Heads only			
Push-pull	Red	40/*1.575*	**ZB2BT4C**
Turn to release	Red	30/*1.181*	**ZB2BS44C**
		40/*1.575*	**ZB2BS54C**



ZB2BS844C

Emergency stop pushbuttons *(1)*

Type of push	Color of push	Diameter Ø (mm)/*in.*	Reference for black bezel
Heads only			
Push-pull	Red	40/*1.575*	**ZB2BT84C**
Turn to release	Red		**ZB2BS844C**



ZB2BW35C

Illuminated pushbutton heads with spring return

Type of push	Color of push	Reference for black bezel
Heads only		
Flush	White	**ZB2BW31C**
	Green	**ZB2BW33C**
	Red	**ZB2BW34C**
	Orange	**ZB2BW35C**
	Blue	**ZB2BW36C**



ZB2BG4C

Selector switch heads

Type of handle	Positions		Reference for black bezel
	Number	Type	
Standard handle	2 - stay put		**ZB2BD2C**
	3 - stay put		**ZB2BD3C**
	3 - spring return from 2 sides		**ZB2BD5C**
Long handle	2 - stay put		**ZB2BJ2C**
	3 - stay put		**ZB2BJ3C**
	3 - spring return from 2 sides		**ZB2BJ5C**
Key	2 - stay put, 1 side pull out		**ZB2BG2C**
	2 - stay put, 2 side pull out		**ZB2BG4C**
	3 - stay put, 3 sides pull out		**ZB2BG0C**

1) Emergency Stop push buttons should have a maximum of 4 nos. contact blocks, installed in 2 rows only.

1



ZB2BWM31C

Complete light bodies (fixing collar + light block)

Light source	Contact		Supply voltage V	Color of light source	Reference
	NO	NC			
Direct Supply					
with BA9S 24 V ≂ bulb	1	–	24 ≂	white	**ZB2BWB11C**
	1	–		green	**ZB2BWB31C**
	–	1		green	**ZB2BWB32C**
	1	–		red	**ZB2BWB41C**
	–	1		red	**ZB2BWB42C**
	1	–		orange	**ZB2BWB51C**
	–	1		orange	**ZB2BWB52C**
	1	–		blue	**ZB2BWB61C**
with BA9S 24 V ≂ bulb	1	–	220-230 ∿	white	**ZB2BWM11C**
	1	–		green	**ZB2BWM31C**
	–	1		green	**ZB2BWM32C**
	1	–		red	**ZB2BWM41C**
	–	1		red	**ZB2BWM42C**
	1	–		orange	**ZB2BWM51C**
	–	1		orange	**ZB2BWM52C**
	1	–		blue	**ZB2BWM61C**



ZB2BZ104C

Contact funtions

Description	Contact		Reference
	NO	NC	
Screw clamp terminal connections			
Single contact block	1	–	**ZB2BE101C**
	–	1	**ZB2BE102C**
Single with body/fixing collar	1	–	**ZB2BZ101C**
	–	1	**ZB2BZ102C**
	2	–	**ZB2BZ103C**
	–	2	**ZB2BZ104C**
	1	1	**ZB2BZ105C**



ZB2BY9330C



ZB2BZ1605C



XALB01C



XALB03C

Circular yellow legends for mushroom head pushbuttons, marked

Mark	Color of push	Reference
Used for “Emergency stop” function		
“EMERGENCY STOP”	Yellow	**ZB2BY9330C**

Yellow guard

Description	Exclusive use with the following Ø 40mm/1.75 in.	Color of push	Reference
Heads only			
For Emergency stop and off function	Emergency switching	Yellow	**ZB2BZ1605C**
Clear boot for dust	Emergency switching	Clear	**ZB2BPAC**

Empty control stations

Description	Characteristics	Dimension w x h x d *mm/in.*	Number of cut-outs	Reference
Complete units - Screw clamp terminal connections				
Light gray "RAL 7035" cover Dark gray "RAL 7016" base	IP65	68 x 86 x 51/ *2.68 x 3.39 x 2*	1	**XALB01C**
		68 x 104 x 51/ *2.68 x 4.1 x 2*	2	**XALB02C**
		68 x 86 x 51/ *2.68 x 3.39 x 2*	3	**XALB03C**
Yellow "RAL 1021" cover Dark gray "RAL 7016" base	IP65	68 x 86 x 51/ *2.68 x 3.39 x 2*	1	**XALB01YC**



02. Easy Harmony Relays

Easy Harmony RXG

Interface Electromechanical Relays



- Conformity with IEC, UL and EAC standards, as well as CE marking
- IP40 protection rating
- Operating temperature from - 40°C to 70°C
- 10 mA at 5V DC minimum switching load
- High electrical durability of 100,000 cycles

The RXG plug-in relays are a series of industrial interface relays available with 1 CO (10A), 2 CO (5A) contacts. It features faston pin terminal for quick and secure mounting, and an optional green LED for relay "on" status indication. With a 16 mm socket option, it helps to reduce the size of enclosures, you can mount nearly everywhere!

Adapted to your applications, segments and operating environments

Data Center | OEM Machines | PLC Interface | Automation Control Panels | Textile | Medical Equipment



RXG18P7



RXG26BD

Interface relays for customer assembly

Type	Control Circuit Voltage	Sold in lots of	Number and type of contacts - Thermal current (Ith)		
			1 CO - 10 A	2 CO - 5 A	Weight
			Unit Reference	Unit Reference	kg/*lb*
Basic cover relays with LED	24 VDC	10	**RXG16BD**	**RXG26BD**	0.019/*0.042*
	230 VAC	10	**RXG16P7**	**RXG26P7**	0.019/*0.042*
Basic cover relays without LED	24 VDC	10	**RXG18BD**	**RXG28BD**	0.019/*0.042*
	230 VAC	10	**RXG18P7**	**RXG28P7**	0.019/*0.042*



RGZE05E

Sockets for interface relays

Sockets with mixed contact terminals arrangement, screw clamp connection, and built-in clamp

Description	Thermal current (Ith)	Sold in lots of	Relay type	Unit Reference	Weight kg/*lb*
1 CO socket with 1 pole	10 A	10	RXG1●●●	**RGZE05E**	0.024/*0.053*
2 CO socket with 2 poles	5 A	10	RXG2●●●	**RGZE08E**	0.026/*0.057*

Easy Harmony RXMLB

Miniature Electromechanical Relays



- Conformity with IEC and UL standards, as well as CE marking
- IP40 protection rating
- Operating temperature from -40°C to 55°C
- 5mA at 5VDC minimum switching load
- High electrical durability of 200,000 cycles

The RXM●LB relays are a series of industrial plug-in relays designed for both simple and complex automation systems and available with 2 CO (5A), 4 CO (3A) contacts. It features a mechanical indicator indicating the relay contact status and optional green LED for relay "on" status.

Adapted to your applications, segments and operating environments

Packaging | HVAC | Industrial Machines | Lighting Controls | Motor Controls | Building



RXM2LB2BD



RXM2LB1BD



RXZE1M2C



RXZ410

Easy Harmony RXM miniature plug-in relays (sold in lots of 10)

Type	Control Circuit Voltage	Number and type of contacts - Thermal current (Ith)			
		2 CO - 5 A	Weight	4 CO - 3 A	Weight
		Unit Reference	kg/*lb*	Unit Reference	kg/*lb*
With LED - Miniature relays without lockable test-button	12 VDC	**RXM2LB2JD**	0.033/*0.073*	**RXM4LB2JD**	0.035/*0.077*
	24 VDC	**RXM2LB2BD**	0.032/*0.071*	**RXM4LB2BD**	0.034/*0.075*
	36 VDC	–	0.034/*0.075*	**RXM4LB2CD**	0.036/*0.079*
	48 VDC	**RXM2LB2ED**	0.033/*0.073*	**RXM4LB2ED**	0.035/*0.077*
	110 VDC	**RXM2LB2FD**	0.031/*0.068*	**RXM4LB2FD**	0.033/*0.073*
	24 VAC	**RXM2LB2B7**	0.033/*0.073*	**RXM4LB2B7**	0.035/*0.077*
	120 VAC	**RXM2LB2F7**	0.032/*0.071*	**RXM4LB2F7**	0.033/*0.073*
	230 VAC	**RXM2LB2P7**	0.031/*0.068*	**RXM4LB2P7**	0.032/*0.071*
Without LED - Miniature relays without lockable test-button	12 VDC	**RXM2LB1JD**	0.032/*0.071*	**RXM4LB1JD**	0.034/*0.075*
	24 VDC	**RXM2LB1BD**	0.032/*0.071*	**RXM4LB1BD**	0.033/*0.073*
	24 VAC	**RXM2LB1B7**	0.033/*0.073*	**RXM4LB1B7**	0.034/*0.075*
	120 VAC	**RXM2LB1F7**	0.031/*0.068*	–	0.033/*0.073*
	230 VAC	**RXM2LB1P7**	0.030/*0.066*	**RXM4LB1P7**	0.032/*0.071*

Sockets with Screw clamp connection

Contact terminal Arrangement	Thermal current (Ith)	Sold in lots of	Relay type	Unit Reference	Weight kg/*lb*
Mixed	7 A	10	RXM2	**RXZE1M2C**	0.034/*0.075*
			RXM2	**RXZE1M4C**	0.053/*0.117*
			RXM4		

Accessories

Description	Sold in lots of	For use with	Unit reference	Weight kg/*lb*
Metal maintaining clamp	20	RXZE1M●C	**RXZ410**	0.001/*0.002*
	10	RXZE1M2C	**RXZ420**	0.001/*0.002*

Easy Harmony Electronic Relays

Timer & Control Relays





- Conformity to cULus, CE, CCC & UKCA
- Cost-effective - essential choice with optimised features
- Easy selection - 6 refs to meet most of the application needs
- Space savings - Compact size with 17.5mm width

The Easy Harmony Electronic Relays range of timers and control relays provides the cost effective choice to meet customers requirements. Easy Harmony RE10 Timer relays that enable and simplify the hard-wired timing control of your application. Easy Harmony RM10 Control relays that provide the basic monitoring & control of 3 phase power feeding to your application.

Adapted to your applications, segments and operating environments

Pumping | Fan | Motor | Generator | Material working | Material handling | Mining Mineral & Metals



RM10TG00N



RM10TA00N



RM10TE00N



RE10RAMUN



RE10RCMUN



RE10RQM7N

Control Relay

Type	Supply Voltage	Function	Number and type of contacts		
			1 CO - 5 A		Weight
			Unit Reference	Timing range	kg/*lb*
3 phase control relay	208…480 VAC	Phase sequence Phase loss	**RM10TG00N**	–	0.075/*0.16*
		Phase sequence Phase loss Phase Asymmetry	**RM10TA00N**	0…15s	0.075/*0.16*
		Phase sequence Phase loss Phase Asymmetry Over & Under Voltage	**RM10TE00N**	0…100s	0.075/*0.16*

Timer relay

Type	Supply Voltage	Function	Number and type of contacts		
			1 CO - 5 A		Weight
			Unit Reference	Timing range	kg/*lb*
Timer	24VAC/DC & 240 VAC	On delay	**RE10RAMUN**	0…30hrs	0.075/*0.16*
	24VAC/DC & 240 VAC	Off delay	**RE10RCMUN**	0…30hrs	0.075/*0.16*
	240 VAC	Star-delta	**RE10RQM7N**	0…120s	0.075/*0.16*



03. Easy Modicon regulated power supplies

Easy Modicon ABL2K power supplies and Accessories

Single phase power supplies 100 V to 240 V from 35 to 350 W



- Conformity with CE, EAC, KC and RCM standards
- Wide power range (11 models from 35 to 350 W)
- Equipped with an input voltage (100-240 V AC) smart switch offering
- Increased performance and durability
- Easy maintenance thus reducing downtime
- They can operate within a wide temperature range

The Easy Modicon ABL2 electronic switch mode power supply offer is designed to provide the DC voltage necessary for electrical equipment operating in a low voltage automation and control system (PLC, HMI, sensors, etc.).

OEMs can integrate these power supplies in simple machines used in the following

Material handling | Textile machine | Packaging | Machine tools | Food & Beverage

Panel builders can integrate them in control panels installed in the following

Construction | Lift | Automobile industry | Chemical industry | Municipal buildings | Infrastructure



BL2REM24015KQ



ABL2REM24085K

ABL2 regulated switch mode 24 V DC power supplies

Model	Output voltage	Nominal power	Output current	Voltage switching	Cooling design	Overload hiccup protection	Reference	Weight kg/*lb*
Input voltage : 100...240 V AC								
35 W	24 V DC	36 W	1.5 A	Automatic	Natural convection	110-160%	**ABL2REM24015K**	0.230/*0.507*
						170-190%	**ABL2REM24015KQ**	0.230/*0.507*
50 W	24 V DC	53 W	2.2 A	Automatic	Natural convection	110-160%	**ABL2REM24020K**	0.250/*0.551*
						170-190%	**ABL2REM24020KQ**	0.250/*0.551*
100 W	24 V DC	108 W	4.5 A	Automatic	Natural convection	110-160%	**ABL2REM24045K**	0.350/*0.772*
						170-190%	**ABL2REM24045KQ**	0.350/*0.772*
Input voltage : 100...120 V AC - 200...240 V AC								
150 W	24 V DC	156 W	6.5 A	Manual	Natural convection	110-160%	**ABL2REM24065K**	0.440/*0.970*
						170-190%	**ABL2REM24065KQ**	0.440/*0.970*
200 W	24 V DC	200 W	8.3 A	Manual	Natural convection	110-150%	**ABL2REM24085K**	0.730/*1.609*
250 W	24 V DC	252 W	10.5 A	Manual	Forced air cooling by built-in DC fan	110-150%	**ABL2REM24100K**	0.750/*1.653*
350 W	24 V DC	351 W	14.6 A	Manual	Forced air cooling by built-in DC fan	110-150%	**ABL2REM24150K**	0.790/*1.742*



ABL2K01



ABL2K02



ABL2K03B

Options for ABL2 power supplies

Type of mounting accessory	For power supplies	Sold in lots of	Unit reference	Weight kg/*lb*
4-corner bracket	ABL2REM24085K ABL2REM24100K ABL2REM2 4150K	40	**ABL2K01**	0.003/*0.007*
Clip-on mounting plate	All models	5 *(1)*	**ABL2K02**	0.028/*0.062*
L-type accessories	ABL2REM24015K ABL2REM24015KQ ABL2REM24020K ABL2REM24020KQ ABL2REM24045K ABL2REM24045KQ ABL2REM24065K ABL2REM24065KQ	1	**ABL2K03A**	0.110/*0.240*
	ABL2REM24085K ABL2REM24100K ABL2REM24150K	1	**ABL2K03B**	0.150/*0.331*

(1) ABL2K02 is a pack of 5 accessories usable on 35 mm (1.37 in.) 5 rails. Please note that only 1 accessory is necessary for mounting a 35 to 150 W model but 2 accessories are needed for the other three models (200, 250, and 350 W).



ABLS1A12060E



ABLS1A24100E



ABLS1A48100E

ABLS regulated switch mode power supplies

Output voltage	Nominal power *(2)*	Nominal current	Voltage switching Cooling design	Overload hiccup protection	Reference	Weight kg/*lb*
Input voltage : 100...240 V AC 50/60 Hz (compatible with 140…340 V DC)						
12 VDC	75.6 W	6.3 A	Constant current mode, automatic recovery after overload is removed	With	**ABLS1A12060E**	0.396/*0.873*
	120 W	10 A	Constant current mode, automatic recovery after overload is removed	With	**ABLS1A12100E**	0.451/*0.994*
24 VDC	76.8 W	3.2 A	Constant current mode, automatic recovery after overload is removed	With	**ABLS1A24030E**	0.396/*0.873*
	120 W	5 A	Constant current mode, automatic recovery after overload is removed	With	**ABLS1A24050E**	0.451/*0.994*
	240 W	10 A	Constant current mode, automatic recovery after overload is removed	With	**ABLS1A24100E**	0.935/*2.061*
	480 W	20 A	"Constant current mode, shutting down after time delay. Re-power on to recover"	With	**ABLS1A24200E**	1.320/*2.910*
	960 W	40 A	Constant current mode, automatic recovery after overload is removed	With	**ABLS1A24400E**	2.200/*4.85*
48 VDC	480 W	10 A	"Constant current mode, shutting down after time delay. Re-power on to recover"	With	**ABLS1A48100E**	1.320/*2.910*
Input voltage : 200...240 VAC						
48 VDC	960 W	20 A	Constant current mode, automatic recovery after overload is removed	With	**ABLS1A48200E**	2.200/*4.85*



04. Easy Harmony Human Machine Interface

Easy Harmony ET6

Essential touch screen panels for simple machines



- Flexible Options :
  Various sizes and connection models available.
- Enhanced Visualization :
  High resolution, large screens, and memory.
- Robust Reliability :
  Strong cybersecurity and environmental protection features.

Easy Harmony ET6 essential touch-screen panels are entry-level products perfectly tailored to meet the specific requirements of the customer. Easy Harmony ET6 is available in four screen sizes with wide format 7”W, 10”W, 12”W and 15”W. This range is designed with high resolution screen, more colors, and Ethernet capability to enable OEMs to optimize their HMI design and investment . It is powered by Vijeo Designer Basic software for intuitive user experience. It has a 800 MHz ARM Cortex-A8 CPU, 256 MB as system and application memory, 128 KB nonvolatile memory. ET6 supports Ethernet port, COM1 (RS-232C), COM2 (RS-422/485), 1x USB 2.0 Type A, and 1x USB 2.0 Micro-B port. This is intended for industries like Packaging, HVAC, Pump, Electronics, battery, machine tools and material working etc. It conforms to standards like EN (61000-6-4, 61000-6-2, 61131-2), UL 61010-2-201, CSA C22.2 No 61010-2-201 and certifications like UL, CE, KC, EAC, China RoHS, REACH. The degree of protection is IP65F.

4

Adapted to your applications, segments and operating environments

Packaging | HVAC & Pumping | Material working | Battery, 3C & SEMICON | Textile | Solar, Printing, etc



HMIET6501

Easy Harmony ET6 SIO touch screen panels *(1) (2)*

Screen size and type	Number of ports	Memory capacity		Unit Reference	Weight kg/*lb*
		For application	For backup		
7” wide, 800 x 480 pixels, color TFT screen	1x COM2 (RS-422/485), 1x COM1 (RS-232C), 1x USB micro-B	256 MB	128 KB	**HMIET6401**	0.60/*1.32*
10” wide, 1,024 x 600 pixels, color TFT screen				**HMIET6501**	0.98/*2.16*



HMIET6700

Easy Harmony ET6 ETH touch screen panels *(1) (2)*

Screen size and type	Number of ports	Memory capacity		Unit Reference	Weight kg/*lb*
		For application	For backup		
7” wide, 800 x 480 pixels, color TFT screen	1x COM1 (RS-232C), 1x COM2 (RS-422/485) 1x USB micro-B, 1x USB Type A, 1x 10/100 Base-Tx	256 MB	128 KB	**HMIET6400**	0.61/1.34
10” wide, 1,024 x 600 pixels, color TFT screen				**HMIET6500**	0.99/2.18
12” wide, 1,280 x 800 pixels, color TFT screen				**HMIET6600**	1.62/3.57
15.6” wide, 1,366 x 768 pixels, color TFT screen				**HMIET6700**	2.52/5.56

(1) Panels supplied with fixing screws, power supply connector, and instruction sheet. Setup documentation for Easy Harmony ET6 panels is included in electronic format with the Vijeo Designer Basic configuration software.
(2) Comprehensive information relating to Easy Harmony ET6 panels is available on our website.

To download software, www.se.com/vijeo designer basic

Vijeo Designer Basic, programming software for Easy Harmony ET6 panels

Description	Used for	Compatibility	Number of stations	Unit Reference
Vijeo Designer Basic *(1)*	Easy Harmony ET6 models	All Easy Harmony ET6 panels (required V1.2 or above)	1	*(2)*

Connection accessories



HMIZG936

Designation	Description	Length - m/*ft*	Unit Reference	Weight kg/*lb*
USB (Type A) front cable	Extension cable that attaches USB interface to front panel	1/*3.28*	**XBTZGUSB**	0.507/*1.118*
USB transfer cable	Cable for transferring screen data from a PC (USB Type A) to HMI (USB micro-B)	1/*3.28*	**HMIZG936**	0.100/*0.220*

(1) Requires software version 1.2. Cable for transferring application from PC to Easy Harmony ET6 panels (HMIZG936) to be ordered separately (see our website www.se.com).

(2) To download this software, visit our website www.se.com.

4



XBTZ9008

Cables for connecting Easy Harmony ET6 panels to Schneider Electric PLCs

Type of automation product	Type of connector (automation product end)	Protocol	Type of Easy Harmony ET6 panels	Physical link (panels port)	Length m/*ft*	Reference	Weight kg/*lb*
Modicon M340 Modicon M218 Modicon M258 Modicon M221 Modicon M241 Modicon M251	RJ45	Modbus	All models	RS-485	2.5/*8.20*	**XBTZ9008**	–
TeSys U/T starters Altivar drives Altistart starters Lexium motion control Preventa XPS MC	RJ45	Modbus	All models	RS-485	2.5/*8.20*	**XBTZ9008**	–

Connecting Easy Harmony ET6 panels via Modbus serial link

Type of bus/ network	Tap-off units	Connector (tap-off unit end)	Type of Easy Harmony ET6 panels	Length m/*ft*	Reference	Weight kg/*lb*
Modbus serial link	8-port Modbus splitter box **LU9GC3** 2-port tap junction **TWDXCAISO** **TWDXCAT3RJ**	RJ45	All models	2.5/*8.20*	**XBTZ9008**	–



05. Easy Modicon Logic Controllers

Easy Modicon M100 and M200

Logic controllers - Up to 168 I/O, 2-axis motion control



- Reduces machine costs by emphasizing core functions like Modbus, USB programming, and basic position control
- Simplifies mounting, wiring, programming, and debugging with Machine Expert Basic software
- Transistor outputs are monitored to help protect against short circuits
- DC power supply monitored to help protect against reverse polarity
- IP20 protection level

Logic controllers are designed for simple machines, making them ideal for installation in wall-mounted and floor-standing control system enclosures. These controllers have an embedded Ethernet port, providing excellent connection capacity. They also offer customization options using I/O or communication cartridges. The Modicon TM3 expansion module enhances the digital and analog I/O capacity of the Easy Modicon M100/200 logic controller on a larger scale.

Adapted to your applications, segments and operating environments

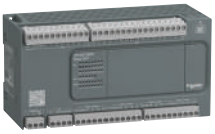
Machine control | Textile | Machines tools | Packaging | HVAC & Pumping | Lift | Energies & chemicals



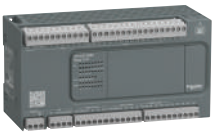
TM100C16RN



TM100C24RN



TM100C32RN



TM100C40RN

Easy Modicon M100 logic controllers *(1)*

Number of digital I/O	Digital inputs	Digital outputs (relay outputs)	Serial link *(2)*	Supply voltage	Programming software *(3)*	Reference
16	■ 9 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 3 regular inputs ■ 2 high speed inputs for HSC	7	1	110...220 VAC	EcoStruxure Machine Expert - Basic	**TM100C16RN**
24	■ 14 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 8 regular inputs ■ 2 high speed inputs for HSC	10				**TM100C24RN**
32	■ 20 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 14 regular inputs ■ 2 high speed inputs for HSC	12				**TM100C32RN**
40	■ 24 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 18 regular inputs ■ 2 high speed inputs for HSC	16				**TM100C40RN**

(1) M100 controllers are supplied with:
- *removable screw terminal blocks for connecting the I/O*
- *a removable screw terminal block for connecting the power supply*
- *a removable screw terminal block for the serial link*

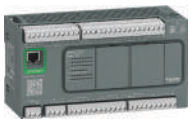
(2) Each M100 logic controller has an embedded USB mini-B programming port.

(3) PC should be equipped with Windows 7 or 10 (32-bit or 64-bit). To download this programming software, please visit our site www.se.com.

EcoStruxure Machine Expert - Basic 4

Easy Modicon M200 logic controllers *(1)*

Supply voltage	Number of digital I/O	Digital inputs	Digital outputs	Dimension (W x H x D)	Ethernet (RJ 45)	Serial link *(2)*	Reference
24 VDC	40	■ 24 sink/source ■ 24 VDC input voltage	■ 16 sink outputs ■ 14 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)	175 x 70 x 90	–	1	**TM200C40U**
		■ 4 fast inputs for FC ■ 16 regular inputs			1		**TM200CE40U**
		■ 4 high speed inputs for HSC	■ 16 source outputs ■ 14 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)		–		**TM200C40T**
					1		**TM200CE40T**



TM200CE40U

Supply voltage	Number of digital I/O	Digital inputs	Digital outputs (relay outputs)	Dimension (W x H x D)	Ethernet (RJ 45)	Serial link *(2)*	Reference
110...220 VAC	16	■ 9 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 1 regular input ■ 4 high speed inputs for HSC	7	110 x 70 x 90	–	1	**TM200C16R**
	24	■ 14 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 6 regular inputs ■ 4 high speed inputs for HSC	10	130 x 70 x 90			**TM200C24R**
					1		**TM200CE24R**
	32	■ 20 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 12 regular inputs ■ 4 high speed inputs for HSC	12	175 x 70 x 90	–		**TM200C32R**
110...220 VAC	32	■ 20 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 12 regular inputs ■ 4 high speed inputs for HSC	12	175 x 70 x 90	1	1	**TM200CE32R**
	40	■ 24 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 16 regular inputs ■ 4 high speed inputs for HSC	16		–		**TM200C40R**
	60	■ 36 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 28 regular inputs ■ 4 high speed inputs for HSC	24	225 x 70 x 90	1		**TM200CE40R**
							TM200C60R



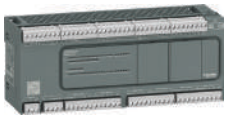
TM200C16R



TM200CE24R



TM200CE32R



TM200C60R

Supply voltage	Number of digital I/O	Digital inputs	Digital outputs	Dimension (W x H x D)	Ethernet (RJ 45)	Serial link *(2)*	Reference
24 VDC	16	■ 9 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 1 regular input ■ 4 high speed inputs for HSC	■ 7 sink outputs ■ 5 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)	110 x 70 x 90	–	1	**TM200C16U**
			■ 7 source outputs ■ 5 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)				**TM200C16T**



TM200C16U

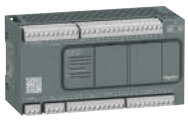
(1) M200 controllers are supplied with:
- *removable screw terminal blocks for connecting the I/O*
- *a removable screw terminal block for connecting the power supply*
- *a removable screw terminal block for the serial link*

(2) Each M200 logic controller has an embedded USB mini-B programming port.

5



TM200CE24U



TM200C32U



TMCR2SL1S



TMCR2AI2



TMCR2AQ2V

Easy Modicon M200 logic controllers *(1)*

Supply voltage	Number of digital I/O	Digital inputs	Digital outputs	Dimension (W x H x D)	Ethernet (RJ 45)	Serial link *(2)*	Reference
24 VDC	24	■ 14 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 6 regular inputs ■ 4 high speed inputs for HSC	■ 10 sink outputs ■ 8 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)	130 x 70 x 90	–	1	**TM200C24U**
					1		**TM200CE24U**
			■ 10 source outputs ■ 8 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)		–		**TM200C24T**
					1		**TM200CE24T**
24 VDC	32	■ 20 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 12 regular inputs ■ 4 high speed inputs for HSC	■ 12 sink outputs ■ 10 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)	175 x 70 x 90	–	1	**TM200C32U**
			■ 12 source outputs ■ 10 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)		–		**TM200C32T**

Cartridges for Easy Modicon M200 logic controllers *(2)*

Description	Details	Reference
Communication cartridges	■ 1 additional RS232C or RS485 serial link on screw terminal block	**TMCR2SL1**
	■ Controllers 16IO/24IO can support 1 additional isolated RS485 serial link on screw terminal block. Controllers 32IO/40IO/60IO can support 2 additional isolated RS485 serial link on screw terminal block	**TMCR2SL1S**
Analog I/O cartridges	■ 2 analog inputs (12-bit resolution) configurable as: - 0…10 V voltage - 0…20 mA/4…20 mA current ■ Connection via screw terminal block	**TMCR2AI2**
	■ 2 analog inputs (12-bit resolution) 0…10V/ 0…5V/ 0…20mA / 4…20mA ■ 1 analog output (12-bit resolution) 0…10V/ 0…5V/ 0…20mA / 4…20mA ■ Connection via screw terminal block	**TMCR2AM3**
	■ 2 temperature inputs (12 or 14-bit resolution depending on input signal) type K, J, R, S, B, E, T, N, C, PT100, PT1000, NI100, NI1000 ■ Connection via screw terminal block	**TMCR2TI2**
Analog I/O cartridges	■ 2 analog outputs (12-bit resolution) 0…10 V voltage ■ Connection via screw terminal block	**TMCR2AQ2V**
	■ 2 analog outputs (12-bit resolution) 4…20 mA current ■ Connection via screw terminal block	**TMCR2AQ2C**

(1) M200 controllers are supplied with:
- *removable screw terminal blocks for connecting the I/O*
- *a removable screw terminal block for connecting the power supply*
- *a removable screw terminal block for the serial link*

(2) One cartridge for controllers with 16 and 24 I/O. Two cartridges maximum for controllers with 32, 40 and 60 I/O, only one of which can be a communication cartridge.



TMARCOVER



TMARBAT1



TMARTB3

Separate parts for Easy Modicon M200 logic controllers

Description	Reference
Catridges cover	**TMARCOVER**
RTC battery	**TMARBAT1**

Replacements parts for Easy Modicon M200 logic controllers

Description	Details	Reference
Set of terminal blocks for connecting the I/O on M200 controllers	3-way terminal block for power supply connection	**TMARTB3**
	4-way terminal block for serial link connection	**TMARTB4**

Expansion modules

Description	Details	Reference
Modicon TM3 expansion modules	Easy Modicon M200 logic controllers	*(1)*

Product compatibility

Expansion options		Reference	Number and type of I/O	M200 logic controllers		
				TM200C16R	TM200C16U	TM200C16T
Modicon TM3	**Digital modules**	**TM3DI8**	8 x 24 V ⎓ sink/source inputs			
		TM3DI16	16 x 24 V ⎓ sink/source inputs			
		TM3DI32K	32 x 24 V ⎓ sink/source inputs			
		TM3DQ8R	8 x 24 V ⎓ /240 V a relay outputs			
		TM3DQ8T	8 x 24 V ⎓ source transistor outputs			
		TM3DQ8U	8 x 24 V ⎓ sink transistor outputs			
		TM3DQ16R	16 x 24 V ⎓ /240 V ∿ relay outputs			
		TM3DQ16T	16 x 24 V ⎓ source transistor outputs			
		TM3DQ16U	16 x 24 V ⎓ sink transistor outputs			
		TM3DQ32TK	32 x 24 V ⎓ source transistor outputs			
		TM3DQ32UK	32 x 24 V ⎓ sink transistor outputs			
		TM3DM8R	4 x 24 V ⎓ sink/source inputs + 4 x 24 V ⎓ /240 V ∿ relay outputs			
		TM3DM24R	16 x 24 V ⎓ sink/source inputs + 8 x 24 V ⎓ /240 V ∿ relay outputs			
		TM3RDM16R	8 x 24 V ⎓ sink/source inputs + 8 x 24 V ⎓ /240 V ∿ relay outputs			
		TM3RDM32R	16 x 24 V ⎓ sink/source inputs + 16 x 24 V ⎓ /240 V ∿ relay outputs			
	Analog modules	**TM3AI2H**	2 voltage/current inputs			
		TM3AI4	4 voltage/current inputs			
		TM3TI4	4 voltage/current or temperature inputs			
		TM3AI8	8 voltage/current inputs			
		TM3TI8T	8 temperature inputs			
		TM3AQ2	2 voltage/current outputs			
		TM3AQ4	4 voltage/current outputs			
		TM3TM3	2 voltage/current or temperature inputs + 1 voltage/current outputs			
		TM3AM6	4 voltage/current inputs + 2 voltage/current outputs			

Possible to combine, up to 4 modules

(1) See our list of product compatibility.

Configuration *(1)(2)*				
Configuration limits	**Maximum number of transistor outputs**	**Maximum number of relay outputs**	**References**	
Logic controllers	130	71	**TM200C16R**	
	137	64	**TM200C16T**	
	137	64	**TM200C16U**	
	130	74	**TM200C24R**	**TM200CE24R**
	140	64	**TM200C24T**	**TM200CE24T**
	140	64	**TM200C24U**	**TM200CE24U**
	132	76	**TM200C32R**	**TM200CE32R**
	144	64	**TM200C32T**	
	144	64	**TM200C32U**	
	132	80	**TM200C40R**	**TM200CE40R**
	148	64	**TM200C40T**	**TM200CE40T**
	148	64	**TM200C40U**	**TM200CE40U**
	132	88	**TM200C60R**	

(1) Modicon TM3 or TM2 digital I/O modules connect to Modicon M200 logic controllers with a maximum of 4 local I/O modules.
(2) The maximum number of Modicon TM3/TM2 expansion modules can be reduced by the number of transistor outputs or relay outputs used (see the table). For more information on TM3/TM2 expansion modules, please visit our website www.se.com.

5



06. Easy Lexium Motion Control

Servo Drives and Servo Motors

Lexium 18P/18E servo drives and the associated BCH18 servo motors



- EMC test result is 120% higher than the IEC standard, passed 85°C high-temperature aging test
- High-standard three-proofing paint and thermal adhesive coating process
- LXM18P: 10DI/6DO, 2-way fast input; 16bit analog input; support 8MHz pulse
- LXM18E: 6DI/3DO, 2-way fast input; STO integrated
- Maximum motor speed up to 6000rpm, improve overload capability to 350%, equipped with 23bit optical electricity encoder.
- Adaptive tuning-free function, response bandwidth increased by 39%

The Easy LexiumTM 18 range includes the Lexium 18P/18E servo drives and the associated BCH18 servo motors. Their combinations are specially designed for easy integration and commissioning in your machine and provide the right level of performance for the majority of various motion control machines.

Adapted to your applications, segments and operating environments

E&E Application | New Energy | Material Handling | Packaging







Lexium 18P/18E servo drives

To order a Lexium 18 servo drive, make up the reference as follows

Lexium 18 AC servo drive			LXM18	●	●	●●●	●●	●
Product Line	Pulse train input			**P**				
	EtherCAT			**E**				
Communication interface	I/O interface with PTI only				**C**			
	I/O interface with PTI, analog and Modbus RTU				**D**			
	EtherCAT with Digital I/O interface				**N**			
	EtherCAT with Digital I/O interface, and STO function				**S**			
Power	Size 1	0.1 kW/*0.13 hp*				**U01**		
		0.2 kW/*0.27 hp*				**U02**		
		0.4 kW/*0.54 hp*				**U04**		
	Size 2	0.75 kW/*1.01 hp*				**U07**		
		1 kW/*1.34 hp*				**U10**		
		1.5 kW/*2.01 hp*				**U15**		
	Size 3	2.0 kW/*2.68 hp*				**U20**		
		3.0 kW/*4.02 hp*				**U30**		
Power Supply Voltage	Single phase, 220Vac						**M2**	
	Three phases, 220Vac						**M3**	
Special function	No built-in EMC filter							**X**

6



VW3M4B01



VW3M4B21



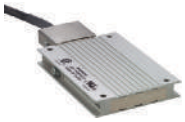
VW3M4B11



VW3M4B12



VW3M4B31



VW3A760●R●●



VW3A773



VW3M3103



VW3A442●

Accessories for Lexium 18P/18E servo drives

Designation	Description	For use with	Reference	Weight kg/lb
Connector set for power & motor	Servo drive power input and output connector kit	LXM18E LXM18P	**VW3M4B01**	0. 012/*0.026*
Connector kit for encoder	6-pin encoder connector kit	LXM18E LXM18P	**VW3M4B21**	0.008/*0.018*
IO connector	50-pin IO connector kit	LXM18P	**VW3M4B11**	0.035/*0.08*
IO connector	20-pin IO connector kit	LXM18E	**VW3M4B12**	0.017/*0.04*
STO plug with insertion bridge	STO plug with insertion bridge	LXM18E	**VW3M4B31**	0.003/*0.01*

External braking resistor *(1)*

Power rating range	Ohmic value (Ω)	Continuous power (W)	Connection	Degree of protection	Reference	Weight kg/*lb*
100 W, 200 W, 400 W	72	400	3 m cable *(9.84 ft)*	IP65	**VW3A7607R30**	1.620/*3.571*
750 W, 1 kW, 1.5 kW	27	400	0.75 m cable *(2.46 ft)*	IP65	**VW3A7603R07**	0.930/*2.050*
2 kW, 3 kW	16	960	M6 terminal	IP20 UL	**VW3A7733**	4.000/*8.818*

Holding brake controller (HBC)

Designation	Description	Reference	Weight kg/*lb*
Holding brake controller	24 V ⎓ power supply Max. power 0.05 kW/*0.07 hp* IP 20 For mounting on 55 mm/*2.17 in* ⊔ rail	**VW3M3103**	*0.600/1.323*

Additional EMC input filters for Lexium 18P/18E servo drives *(2)*

For servo drive *1x EMC filter and a single Lexium 18P/18E servo drive*	Nominal power	Line current	Reference	Weight kg/*lb*
Single phase 220Vac, 200Vac -15%...240Vac +10%				
LXM18●●U01M2X **LXM18●●U02M2X** **LXM18●●U04M2X** **LXM18●●U07M2X**	0.1 to 0.75 kW *(0.13 to 1.01 hp)*	9 A	**VW3A4420**	0.600/*1.323*
LXM18●●U10M2X **LXM18●●U15M2X**	1 and 1.5 kW *(1.34 and 2.01 hp)*	16 A	**VW3A4421**	0.775/*1.709*
Three-phasesupplyvoltage:220Vac 200Vac-15%...240Vac+10%				
LXM18●●U20M3X **LXM18●●U30M3X**	2 and 3 kW *(2.68 and 4.02 hp)*	25 A	**VW3A4423**	1.350/*2.976*

(1) The total continuous power dissipated in the external braking resistor(s) must be less than or equal to the nominal power of the Lexium 18P/18E servo drive.

(2) Standard IEC/EN 61800-3: EMC immunity and conducted and radiated EMC emissions: Category C3 in environment 2: industrial premises.



GV2P●●

+



LC1●●●●●

+



LXM18P

or



LXM18E

Motor starters

Protection using class J fuses (UL certification)

Servo drive		Circuit-breaker		Contactor
Reference	**Nominal power (kW/*hp*)**	**Reference**	**Rating (A)**	**Reference** *(1) (2)*
Circuit-breakers for single drive installation according to IEC 60364-5-52				
Single phase 220Vac, 200Vac -15%...240Vac +10%				
LXM18●●U01M2X	0.1/*0.13*	GV2P10	6.3	**LC1K0610●●**
LXM18●●U02M2X	0.2/*0.27*	GV2P10	6.3	**LC1K0610●●**
LXM18●●U04M2X	0.4/*0.54*	GV2P14	10	**LC1K09●●**
LXM18●●U07M2X	0.75/*1.01*	GV2P16	14	**LC1K09●●**
LXM18●●U10M2X	1.0/*1.34*	GV2P20	18	**LC1K09●●**
LXM18●●U15M2X	1.5/*2.01*	GV2P22	25	**LC1D18●●**
Three-phase supply voltage: 220Vac, 200Vac -15%...240Vac +10%				
LXM18●●U20M3X	2.0/*2.68*	GV2P22	25	**LC1D18●●**
LXM18●●U30M3X	3.0/*4.02*	GV2P32	32	**LC1D32●●**

(1) Composition of the contactors:
LC1K0610●●: 3 poles + 1 N/O auxiliary contact
LC1K09●●: 4 poles
LC1D18●●: 3 poles + 1 N/O auxiliary contact + 1 N/C auxiliary contact
Please refer to contactors and protection relays page on our web site.
(2) Replace ●● with the control circuit voltage code given in the table below:

		230Vac	*240Vac*
LC1K0610●● **LC1K09●●**	*50/60 Hz*	**P7**	**U7**
		230Vac	*230/240Vac*
LC1D18●● **LC1D32●●**	*50 Hz*	**P5**	**U5**
	60 Hz	–	**U6**
	50/60 Hz	**P7**	**U7**

For other available voltages between 24 V and 660 V, or a DC control circuit, please contact our Customer Care Center.

Protection using class J fuses (UL certification)

Servo drive		Fuse to be placed upstream
Reference	**Nominal power**	
Single phase 220Vac, 200Vac -15%...240Vac +10%		
LXM18●●U01M2X	0.1 kW/*0.13 hp*	6 A
LXM18●●U02M2X	0.2 kW / *0.27 hp*	6 A
LXM18●●U04M2X	0.4 kW / *0.54 hp*	10 A
LXM18●●U07M2X	0.75 kW / *1.01 hp*	15 A
LXM18●●U10M2X	1.0 kW / *1.34 hp*	20 A
LXM18●●U15M2X	1.5 kW / *2.01 hp*	25 A
Three-phase supply voltage: 220Vac, 200Vac -15%...240Vac +10%		
LXM18●●U20M3X	2.0 kW / *2.68 hp*	25 A
LXM18●●U30M3X	3.0 kW / *4.02 hp*	35 A

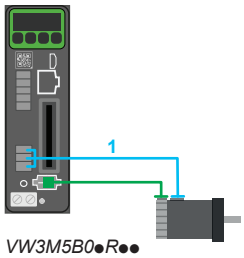




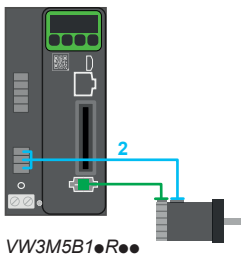
BCH18 servo motors

To order a BCH18 servo motor, make up the reference as follows:

BCH18		●	●	●●	●	●	●	●	●	C
Inertia	Low inertia	L								
	Medium inertia	M								
Flange size	40 mm *(1.57 in)* – Shaft diameter 8 mm *(0.31 in)*		B							
	60 mm *(2.36 in)* – Shaft diameter 8 mm *(0.31 in)* or 14 mm *(0.55 in)*		D							
	80 mm *(3.15 in)* – Shaft diameter 14 mm *(0.55 in) or* 19 mm *(0.75 in)*		F							
	100 mm *(3.94 in)* – Shaft diameter 22 mm *(0.87 in)*		H							
	130 mm *(5.12 in)* – Shaft diameter 22 mm *(0.87 in)*, 24 mm *(0.94 in)* or 28 mm *(1.102 in)*		M							
	180 mm *(7.09 in)* – Shaft diameter 35 mm *(1.38 in)*		R							
Nominal power	50 W *(0.06 hp)*			A5						
	100 W *(0.13 hp)*			01						
	200 W *(0.16 hp)*			02						
	400 W *(0.53 hp)*			04						
	750 W *(1.00 hp)*			07						
	850 W *(1.13 hp)*			08						
	1 kW *(1.34 hp)*			10						
	1.3 kW *(1.74 hp)*			13						
	1.5 kW (*2.01 hp)*			15						
	1.8 kW *(2.41 hp)*			18						
	2.0 kW *(2.68 hp)*			20						
	2.4 kW *(3.22 hp)*			24						
	3.0 kW *(4.02 hp)*			30						
Winding type (Power supply 220Vac)	Optimized in terms of torque (1500 rpm)				1					
	Optimized in terms of torque and speed of rotation (2000 rpm)				2					
	Optimized in terms of speed of rotation (3000 rpm)				3					
Shaft end	Parallel keyed shaft (shaft & housing IP 67)					3				
Encoder	23-bit optic incremental encoder						2			
	23-bit optic multi-turn absolute encoder						C			
Holding brake	Without holding brake							A		
	With holding brake							F		
Connections	Micro plastic connectors								5	
	Military connectors								6	
Voltage	220 Vac									C



VW3M5B0●R●●

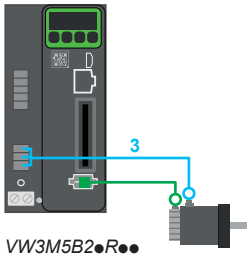


VW3M5B1●R●●

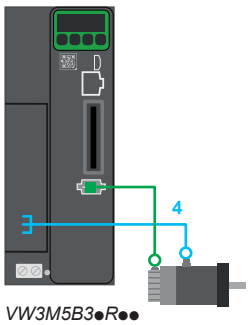
Power cables for BCH18 servo motors

Unshielded Power cables

Designation	For use		For cable cross-section	Length		Reference	Weight	
	From servo drive	To servo motor		m	ft		kg	*lb*
Toward load, Plastic connector, size 0 - item 1								
Equipped with one plastic connector Size 0 (Motor end)	LXM18E●U01M2X LXM18P●U01M2X	BCH18LB●● BCH18MB●●	4G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B01RA5**	0.060	*0.132*
				3	*9.84*	**VW3M5B01R03**	0.117	*0.257*
				5	*16.40*	**VW3M5B01R05**	0.193	*0.425*
				10	*32.81*	**VW3M5B01R10**	0.383	*0.844*
				15	*49.21*	**VW3M5B01R15**	0.573	*1.263*
				20	*65.62*	**VW3M5B01R20**	0.763	*1.682*
				25	*82.02*	**VW3M5B01R25**	0.953	*2.101*
Equipped with one plastic connector size 0 (Motor end), with brake	LXM18E●U01M2X LXM18P●U01M2X	BCH18LB●● BCH18MB●●	6G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B02RA5**	0.078	*0.171*
				3	*9.84*	**VW3M5B02R03**	0.152	*0.336*
				5	*16.40*	**VW3M5B02R05**	0.252	*0.555*
				10	*32.81*	**VW3M5B02R10**	0.501	*1.104*
				15	*49.21*	**VW3M5B02R15**	0.750	*1.653*
				20	*65.62*	**VW3M5B02R20**	0.999	*2.202*
				25	*82.02*	**VW3M5B02R25**	1.248	*2.751*
Toward back, Plastic connector, Size 0 - item 1								
Equipped with one plastic connector size 0 (Motor end)	LXM18E●U01M2X LXM18P●U01M2X	BCH18LB●● BCH18MB●●	4G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B03RA5**	0.060	*0.132*
				3	*9.84*	**VW3M5B03R03**	0.117	*0.257*
				5	*16.40*	**VW3M5B03R05**	0.193	*0.425*
				10	*32.81*	**VW3M5B03R10**	0.383	*0.844*
				15	*49.21*	**VW3M5B03R15**	0.573	*1.263*
				20	*65.62*	**VW3M5B03R20**	0.763	*1.682*
				25	*82.02*	**VW3M5B03R25**	0.953	*2.101*
Equipped with one plastic connector size 0, with brake (Motor end)	LXM18E●U01M2X LXM18P●U01M2X	BCH18LB●● BCH18MB●●	6G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B04RA5**	0.078	*0.171*
				3	*9.84*	**VW3M5B04R03**	0.152	*0.336*
				5	*16.40*	**VW3M5B04R05**	0.252	*0.555*
				10	*32.81*	**VW3M5B04R10**	0.501	*1.104*
				15	*49.21*	**VW3M5B04R15**	0.750	*1.653*
				20	*65.62*	**VW3M5B04R20**	0.999	*2.202*
				25	*82.02*	**VW3M5B04R25**	1.248	*2.751*
Toward load, Plastic connector, Size 1 - item 2								
Equipped with one plastic connector size 1 (Motor end)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)*	1.5	*4.92*	**VW3M5B11RA5**	0.097	*0.214*
				3	*9.84*	**VW3M5B11R03**	0.190	*0.418*
				5	*16.40*	**VW3M5B11R05**	0.313	*0.690*
				10	*32.81*	**VW3M5B11R10**	0.622	*1.372*
				15	*49.21*	**VW3M5B11R15**	0.931	*2.053*
				20	*65.62*	**VW3M5B11R20**	1.240	*2.734*
				25	*82.02*	**VW3M5B11R25**	1.549	*3.415*
Equipped with one plastic connector size 1 (Motor end), with brake	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)* +2*0.2mm² *(32 AWG)*	1.5	*4.92*	**VW3M5B12RA5**	0.110	*0.242*
				3	*9.84*	**VW3M5B12R03**	0.216	*0.475*
				5	*16.40*	**VW3M5B12R05**	0.356	*0.786*
				10	*32.81*	**VW3M5B12R10**	0.708	*1.562*
				15	*49.21*	**VW3M5B12R15**	1.060	*2.338*
				20	*65.62*	**VW3M5B12R20**	1.412	*3.114*
				25	*82.02*	**VW3M5B12R25**	1.764	*3.890*
Toward back, Plastic connector, Size 1 - item 2								
Equipped with one plastic connector size 1 (Motor end)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)*	1.5	*4.92*	**VW3M5B13RA5**	0.097	*0.214*
				3	*9.84*	**VW3M5B13R03**	0.190	*0.418*
				5	*16.40*	**VW3M5B13R05**	0.313	*0.690*
				10	*32.81*	**VW3M5B13R10**	0.622	*1.372*
				15	*49.21*	**VW3M5B13R15**	0.931	*2.053*
				20	*65.62*	**VW3M5B13R20**	1.240	*2.734*
				25	*82.02*	**VW3M5B13R25**	1.549	*3.415*
Equipped with one plastic connector size 1 (Motor end), with brake	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)* +2*0.2mm² *(32 AWG)*	1.5	*4.92*	**VW3M5B14RA5**	0.110	*0.242*
				3	*9.84*	**VW3M5B14R03**	0.216	*0.475*
				5	*16.40*	**VW3M5B14R05**	0.356	*0.786*
				10	*32.81*	**VW3M5B14R10**	0.708	*1.562*
				15	*49.21*	**VW3M5B14R15**	1.060	*2.338*
				20	*65.62*	**VW3M5B14R20**	1.412	*3.114*
				25	*82.02*	**VW3M5B14R25**	1.764	*3.890*



VW3M5B2●R●●



VW3M5B3●R●●
VW3M5B4●R●●

Power cables for BCH18 motors

Unshielded Power cables

Designation	For use		For cable cross-section	Length		Reference	Weight	
	From servo drive	To servo motor		m	ft		kg	*lb*
Military connector, Size 1 - item 3								
Equipped with one military connector size 1 (Motor end), and free wires (servo drive side)	LXM18●●U10M2X LXM18●●U15M2X	BCH18LH103●● BCH18LH153●● BCH18MM081●● BCH18MM102●● BCH18MM131●● BCH18MM152●●	4G*1.5mm² *(16 AWG)*	1.5	*4.92*	**VW3M5B21RA5**	0.291	*0.643*
				3	*9.84*	**VW3M5B21R03**	0.482	*1.062*
				5	*16.40*	**VW3M5B21R05**	0.735	*1.621*
				10	*32.81*	**VW3M5B21R10**	1.369	*3.019*
				15	*49.21*	**VW3M5B21R15**	2.003	*4.416*
				20	*65.62*	**VW3M5B21R20**	2.637	*5.814*
				25	*82.02*	**VW3M5B21R25**	3.271	*7.212*
Equipped with one military connector size 1, with brake (Motor end) and free wires (servo drive side)	LXM18●●U10M2X LXM18●●U15M2X	BCH18LH103●● BCH18LH153●● BCH18MM081●● BCH18MM102●● BCH18MM131●● BCH18MM152●●	4G*1.5mm² *(16 AWG)* +2*0.5mm² *(20 AWG)*	1.5	*4.92*	**VW3M5B22RA5**	0.329	*0.725*
				3	*9.84*	**VW3M5B22R03**	0.556	*1.226*
				5	*16.40*	**VW3M5B22R05**	0.859	*1.895*
				10	*32.81*	**VW3M5B22R10**	1.617	*3.566*
				15	*49.21*	**VW3M5B22R15**	2.375	*5.237*
				20	*65.62*	**VW3M5B22R20**	3.133	*6.908*
				25	*82.02*	**VW3M5B22R25**	3.891	*8.579*
Military connector, Size 1 - item 4								
Equipped with one military connector size 2 (Motor end) and free wires (servo drive side)	LXM18●●U20M3X LXM18●●U30M3X	BCH18LH203●● BCH18LM303●● BCH18MM181●● BCH18MM202●●	4G*2.5mm² *(14 AWG)*	1.5	*4.92*	**VW3M5B31RA5**	0.395	*0.871*
				3	*9.84*	**VW3M5B31R03**	0.687	*1.514*
				5	*16.40*	**VW3M5B31R05**	1.076	*2.372*
				10	*32.81*	**VW3M5B31R10**	2.049	*4.518*
				15	*49.21*	**VW3M5B31R15**	3.022	*6.663*
				20	*65.62*	**VW3M5B31R20**	3.995	*8.808*
				25	*82.02*	**VW3M5B31R25**	4.968	*10.953*
Equipped with one military connector size 2, with brake (Motor end) and free wires (servo drive side)	LXM18●●U20M3X LXM18●●U30M3X	BCH18LH203●● BCH18LM303●● BCH18MM181●● BCH18MM202●●	4G*2.5mm² *(14 AWG)* + 2*0.5mm² *(20 AWG)*	1.5	*4.92*	**VW3M5B32RA5**	0.433	*0.955*
				3	*9.84*	**VW3M5B32R03**	0.763	*1.681*
				5	*16.40*	**VW3M5B32R05**	1.202	*2.651*
				10	*32.81*	**VW3M5B32R10**	2.301	*5.073*
				15	*49.21*	**VW3M5B32R15**	3.400	*7.496*
				20	*65.62*	**VW3M5B32R20**	4.499	*9.919*
				25	*82.02*	**VW3M5B32R25**	5.598	*12.342*
Military connector, Size 2- item 4								
Equipped with one military connector size 3 (Motor end) and free wires (servo drive side)	LXM18●●U30M3X	BCH18MR241●● BCH18MR301●●	4G*2.5mm² *(14 AWG)*	1.5	*4.92*	**VW3M5B41RA5**	0.443	*0.977*
				3	*9.84*	**VW3M5B41R03**	0.735	*1.620*
				5	*16.40*	**VW3M5B41R05**	1.124	*2.478*
				10	*32.81*	**VW3M5B41R10**	2.097	*4.623*
				15	*49.21*	**VW3M5B41R15**	3.070	*6.768*
				20	*65.62*	**VW3M5B41R20**	4.043	*8.913*
				25	*82.02*	**VW3M5B41R25**	5.016	*11.058*
Equipped with one military connector size 3, with brake (Motor end) and free wires (servo drive side)	LXM18●●U30M3X	BCH18MR241●● BCH18MR301●●	4G*2.5mm² *(14 AWG)* + 2*0.5mm² *(20 AWG)*	1.5	*4.92*	**VW3M5B42RA5**	0.481	*1.060*
				3	*9.84*	**VW3M5B42R03**	0.811	*1.787*
				5	*16.40*	**VW3M5B42R05**	1.250	*2.756*
				10	*32.81*	**VW3M5B42R10**	2.349	*5.179*
				15	*49.21*	**VW3M5B42R15**	3.448	*7.602*
				20	*65.62*	**VW3M5B42R20**	4.547	*10.025*
				25	*82.02*	**VW3M5B42R25**	5.646	*12.448*



VW3M5B10



VW3M5B11



VW3M5B12



VW3M5B21

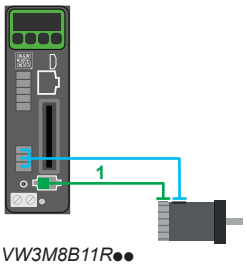


VW3M5B22

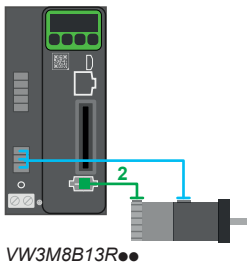
Accessories

Designation	Description	Reference	Weight	
			kg	*lb*
Motor power connector kits	Motor power connector kit, plastic size 0	**VW3M5B10**	0.005	*0.011*
	Motor power connector kit, toward load, plastic size 1	**VW3M5B11**	0.007	*0.015*
	Motor power connector kit, toward back, plastic size 1	**VW3M5B12**	0.007	*0.015*
	Motor power connector kit, military size 1	**VW3M5B21**	0.100	*0.220*
	Motor power connector kit, military size 2	**VW3M5B22**	0.155	*0.342*

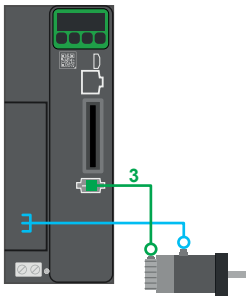
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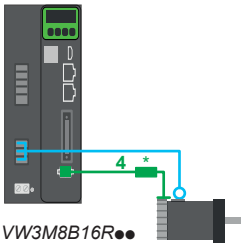
VW3M8B11R●●



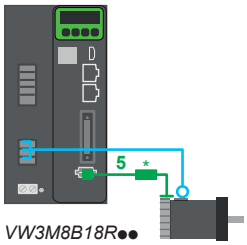
VW3M8B13R●●



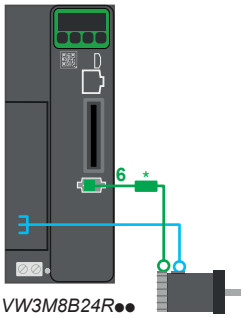
VW3M8B21R●●



VW3M8B16R●●



VW3M8B18R●●



VW3M8B24R●●

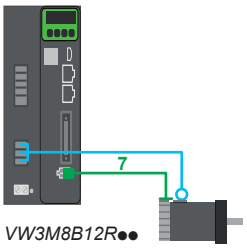
Encoder cables for BCH18 servo motors

Shielded Encoder cables for incremental and singleturn absolute encoders

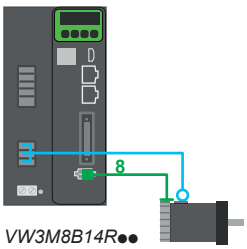
Designation	For use		For cable cross-section	Length		Reference	Weight	
	From servo drive	To servo motor		m	ft		kg	lb
Toward load, Plastic connector - item 1								
Equipped with one plastic connector (Motor end) and Sunchu 6-pin connector (servo drive side)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	40/60/80 mm flange *(1.57/ 2.36/ 3.15 in flange)*	2*0.5mm² *(20 AWG)* + 2*0.25 mm² *(24 AWG)*	1.5	*4.92*	**VW3M8B11RA5**	0.105	*0.232*
				3	*9.84*	**VW3M8B11R03**	0.200	*0.440*
				5	*16.40*	**VW3M8B11R05**	0.325	*0.717*
				10	*32.81*	**VW3M8B11R10**	0.639	*1.409*
				15	*49.21*	**VW3M8B11R15**	0.953	*2.101*
				20	*65.62*	**VW3M8B11R20**	1.267	*2.794*
				25	*82.02*	**VW3M8B11R25**	1.581	*3.486*
Toward back, Plastic connector - item 2								
Equipped with one plastic connector (Motor end) and Sunchu 6-pin connector (servo drive side)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	40/60/80 mm flange *(1.57/ 2.36/ 3.15 in flange)*	2*0.5mm² *(20 AWG)* + 2*0.25 mm² *(24 AWG)*	1.5	*4.92*	**VW3M8B13RA5**	0.105	*0.232*
				3	*9.84*	**VW3M8B13R03**	0.200	*0.440*
				5	*16.40*	**VW3M8B13R05**	0.325	*0.717*
				10	*32.81*	**VW3M8B13R10**	0.639	*1.409*
				15	*49.21*	**VW3M8B13R15**	0.953	*2.101*
				20	*65.62*	**VW3M8B13R20**	1.267	*2.794*
				25	*82.02*	**VW3M8B13R25**	1.581	*3.486*
Military connector - item 3								
Equipped with one military connector (Motor end) and Sunchu 6-pin connector (servo drive side)	LXM18●●U10M2X LXM18●●U15M2X LXM18●●U20M3X LXM18●●U30M3X	100/130/180 mm flange *(3.94/ 5.12/ 7.09 in flange)*	2*0.5mm² *(20 AWG)* + 2*0.25 mm² *(24 AWG)*	1.5	*4.92*	**VW3M8B21RA5**	0.139	*0.306*
				3	*9.84*	**VW3M8B21R03**	0.233	*0.514*
				5	*16.40*	**VW3M8B21R05**	0.359	*0.790*
				10	*32.81*	**VW3M8B21R10**	0.673	*1.483*
				15	*49.21*	**VW3M8B21R15**	0.987	*2.175*
				20	*65.62*	**VW3M8B21R20**	1.301	*2.867*
				25	*82.02*	**VW3M8B21R25**	1.615	*3.559*

Shielded encoder cables for multi-turn absolute encoder, with battery

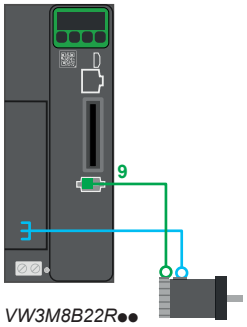
Toward load, MICRO plastic connector, with Battery* - item 4								
Equipped with one MICRO plastic connector (Motor end), and a battery (servo drive side)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	40/60/80 mm flange *(1.57/2.36/3.15 in flange)*	2*0.5mm² (20 AWG) +2*(2*0.25) mm² (24 AWG)	1.5	*4.92*	**VW3M8B16RA5**	0.148	*0.326*
				3	*9.84*	**VW3M8B16R03**	0.249	*0.549*
				5	*16.40*	**VW3M8B16R05**	0.384	*0.847*
				10	*32.81*	**VW3M8B16R10**	0.721	*1.590*
				15	*49.21*	**VW3M8B16R15**	1.058	*2.332*
				20	*65.62*	**VW3M8B16R20**	1.395	*3.075*
				25	*82.02*	**VW3M8B16R25**	1.732	*3.818*
Toward back, MICRO plastic connector, with Battery* - item 5								
Equipped with one MICRO plastic connector (Motor end) and a battery (servo drive side)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	40/60/80 mm flange *(1.57/2.36/3.15 in flange)*	2*0.5mm² (20 AWG) +2*(2*0.25) mm² (24 AWG)	1.5	*4.92*	**VW3M8B18RA5**	0.148	*0.326*
				3	*9.84*	**VW3M8B18R03**	0.249	*0.549*
				5	*16.40*	**VW3M8B18R05**	0.384	*0.847*
				10	*32.81*	**VW3M8B18R10**	0.721	*1.590*
				15	*49.21*	**VW3M8B18R15**	1.058	*2.332*
				20	*65.62*	**VW3M8B18R20**	1.395	*3.075*
				25	*82.02*	**VW3M8B18R25**	1.732	*3.818*
Military connector with battery* - item 6								
Equipped with one Military connector (Motor end) and a battery (servo drive side)	LXM18●●U10M2X LXM18●●U15M2X LXM18●●U20M3X LXM18●●U30M3X	100/130/180 mm flange *(3.94/5.12/7.09 in flange)*	2*0.5mm² (20 AWG) +2*(2*0.25) mm² (24 AWG)	1.5	*4.92*	**VW3M8B24RA5**	0.183	*0.403*
				3	*9.84*	**VW3M8B24R03**	0.284	*0.626*
				5	*16.40*	**VW3M8B24R05**	0.419	*0.924*
				10	*32.81*	**VW3M8B24R10**	0.756	*1.667*
				15	*49.21*	**VW3M8B24R15**	1.093	*2.410*
				20	*65.62*	**VW3M8B24R20**	1.430	*3.153*
				25	*82.02*	**VW3M8B24R25**	1.767	*3.896*



VW3M8B12R●●



VW3M8B14R●●



VW3M8B22R●●



VW3M8B11



VW3M8B21



VW3M8BAT1

Encoder cables for BCH18 servo motors *(Continued)*

Shielded encoder cables for multi-turn absolute encoder, without battery

Designation	For use		For cable cross-section	Length		Reference	Weight	
	with servo drive	To servo motor		m	ft		kg	*lb*
Toward load, MICRO plastic connector without battery- item 7								
Equipped with one MICRO plastic connector (Motor end)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	40/60/80 mm flange *(1.57/2.36/3.15 in flange)*	2*0.5mm² (20 AWG) +2*(2*0.25) mm² (24 AWG)	1.5	*4.92*	**VW3M8B12RA5**	0.112	*0.247*
				3	*9.84*	**VW3M8B12R03**	0.213	*0.470*
				5	*16.40*	**VW3M8B12R05**	0.348	*0.767*
				10	*32.81*	**VW3M8B12R10**	0.685	*1.510*
				15	*49.21*	**VW3M8B12R15**	1.022	*2.253*
				20	*65.62*	**VW3M8B12R20**	1.359	*2.996*
				25	*82.02*	**VW3M8B12R25**	1.696	*3.739*
Toward back, MICRO plastic connector without battery- item 8								
Equipped with one MICRO plastic connector (Motor end)	LXM18●●U01M2X LXM18●●U02M2X LXM18●●U04M2X LXM18●●U07M2X LXM18●●U10M2X	40/60/80 mm flange *(1.57/2.36/3.15 in flange)*	2*0.5mm² (20 AWG) +2*(2*0.25) mm² (24 AWG)	1.5	*4.92*	**VW3M8B14RA5**	0.112	*0.247*
				3	*9.84*	**VW3M8B14R03**	0.213	*0.470*
				5	*16.40*	**VW3M8B14R05**	0.348	*0.767*
				10	*32.81*	**VW3M8B14R10**	0.685	*1.510*
				15	*49.21*	**VW3M8B14R15**	1.022	*2.253*
				20	*65.62*	**VW3M8B14R20**	1.359	*2.996*
				25	*82.02*	**VW3M8B14R25**	1.696	*3.739*
Military connector without battery- item 9								
Equipped with one Military connector (Motor end)	LXM18●●U10M2X LXM18●●U15M2X LXM18●●U20M3X LXM18●●U30M3X	100/130/180 mm flange *(3.94/5.12/7.09 in flange)*	2*0.5mm² (20 AWG) +2*(2*0.25) mm² (24 AWG)	1.5	*4.92*	**VW3M8B22RA5**	0.147	*0.324*
				3	*9.84*	**VW3M8B22R03**	0.248	*0.547*
				5	*16.40*	**VW3M8B22R05**	0.383	*0.844*
				10	*32.81*	**VW3M8B22R10**	0.720	*1.587*
				15	*49.21*	**VW3M8B22R15**	1.057	*2.330*
				20	*65.62*	**VW3M8B22R20**	1.394	*3.073*
				25	*82.02*	**VW3M8B22R25**	1.731	*3.816*

Accesssories

Designation	Description	Reference	Weight	
			kg	lb
Motor encoder connector kits	Plastic	**VW3M8B11**	0.005	*0.011*
	Military	**VW3M8B21**	0.035	*0.077*
Battery	Battery case including battery, 3.6V, 2700 mAh To use with LXM18P/18E servo drives	**VW3M8BAT1**	0.055	*0.121*

6

Notes



07. Easy Altivar variable speed drives

Altivar 310

Variable speed drives for application from 0.37 to 22 kW / 0.5 to 30 HP.



- Integrate as standard the Modbus communication protocol
- Minimize installation and debugging time due to the plug & play concept
- Easy to commission with short menu by integrated keypad
- With stand a 55 °C/131 °F ambiant air temperature without derating
- Innovated air flow design and thicker coating which avoids polluting PCB

The compact size of the **Easy Altivar 310**, its robust design, its ease of installation, based on the principle of Plug & Play, its integrated functions and macro configuration make it particularly suitable for applications involving industrial machines and certain consumer machines. The Easy Altivar 310 has been developed with no compromise on quality and strong robustness in any situation even in harsh environment. Reduces thermal stresses on the electrical distribution network.

Adapted to your applications, segments and operating environments

Material handling | Packaging and printing machine | Wood making machine | Machine tools | Texitile machine | Ceramic machine | Pump and fan



ATV310H037N4E



ATV310HU15N4E



ATV310HU30N4E

Drives for asynchronous motor - Three-phase supply voltage: 380…460 V 50/60 Hz

Motor			Line support			Easy Altivar 310				
Power indicated on rating plate *(1)*			Max. input current *(2)*		Apparent power	Maximum continuous output current *(In)* *(1)*	Maximum transient current for 60s	Dissipated power at maximum output current *(In)* *(1)*	Reference *(6)*	Weight *(3)* kg/*lb*
ND: Normal duty *(4)* HD: Heavy duty *(5)*			380 V	460 V	460 V	380 V				
	kW	HP	A	A	kVA	A	A	W		
HD	0.37	0.5	2.1	1.8	1.4	1.5	2.3	22.7	**ATV310H037N4E**	0.800/*1.760*
HD	0.75	1	3.5	3.1	2.5	2.3	3.5	34.1	**ATV310H075N4E**	0.800/*1.760*
HD	1.5	2	6.5	5.4	4.3	4.1	6.2	60.4	**ATV310HU15N4E**	1.100/*2.430*
HD	2.2	3	8.8	7.2	5.7	5.5	8.3	75.5	**ATV310HU22N4E**	1.100/*2.430*
HD	3	4	11.1	9.2	7.3	7.1	10.7	90.8	**ATV310HU30N4E**	1.800/*3.970*
ND	4	5	14.2	11.6	9.3	8.9	9.8	120.4		
HD	4	5	13.7	11.4	9.1	9.5	14.3	115.1	**ATV310HU40N4E**	1.800/*3.970*
ND	5.5	7.5	18.0	14.9	15.1	12.1	13.3	158.3		
HD	5.5	7.5	21.3	14.3	11.4	12.6	18.9	162.4	**ATV310HU55N4E**	1.800/*3.970*
ND	7.5	10	23.0	19.0	15.1	16.0	17.6	201.9		

(1) These values are given for a nominal switching frequency of 4 kHz, for use in continuous operation.
If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz and 20% for 12 kHz.
The switching frequency can be set between 2 and 12 kHz for all ratings.
Above 4 kHz, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise.
See the derating curves in the User Manual, available on our local website.
(2) Typical value for the indicated motor power and for the maximum prospective line Isc.
• ≤ 4kW, network short circuit current Isc ≤ 5kA
• > 4kW, network short circuit current Isc : ≤ 22kA for Heavy duty, ≤ 5kA for Normal duty
(3) Weight of product without packaging.
(4) Values given for applications requiring significant overload (up to 150% for 60 s).
(5) Values given for applications requiring slight overload (up to 110% for 60 s).



ATV310HU75N4E



ATV310HD15N4E



ATV310HD22N4E

Drives for asynchronous motor - Three-phase supply voltage: 380…460 V 50/60 Hz

Motor			Line support			Easy Altivar 310			Reference (6)	Weight (3) kg/lb
Power indicated on rating plate (1)			Max. input current (2)		Apparent power	Maximum continuous output current (In) (1)	Maximum transient current for 60s	Dissipated power at maximum output current (In) (1)		
ND: Normal duty (4)										
HD: Heavy duty (5)			380 V	460 V	460 V	380 V				
	kW	HP	A	A	kVA	A	A	W		
HD	7.5	10	26.6	22.4	17.8	17.0	25.5	241.2	**ATV310HU75N4E**	3.700/*8.16*
ND	11	15	29.5	24.8	19.4	22.8	25.1	317.8		
HD	11	15	36.1	30.4	24.2	24	36.0	337.1	**ATV310HD11N4E**	3.700/*8.16*
ND	15	20	38.6	32.5	25.4	30	33.0	407.0		
HD	15	20	46.5	38.5	30.7	33	49.5	416.0	**ATV310HD15N4E**	6.300/*13.9*
ND	18.5	25	46.6	38.8	31.2	36	39.6	451.7		
HD	18.5	25	55.3	45.8	36.5	39	58.5	515.9	**ATV310HD18N4E**	6.300/*13.9*
ND	22	30	54.1	45.1	35.7	43	47.3	539.4		
HD	22	30	64.2	53.2	46.2	46	69.0	568.8	**ATV310HD22N4E**	8.500/*18.7*
ND	30	40	71.2	59.2	47.0	60	66.0	735.6		
HD	15	20	46.5	38.5	30.7	33	49.5	424.4	**ATV310HD15N4EF**	6.700/*14.8*
ND	18.5	25	46.6	38.8	31.2	36	39.6	460.2		
HD	18.5	25	55.3	45.8	36.5	39	58.5	527.8	**ATV310HD18N4EF**	6.700/*14.8*
ND	22	30	54.1	45.1	35.7	43	47.3	550.9		
HD	22	30	64.2	53.2	46.2	46	69.0	593.5	**ATV310HD22N4EF**	9.700/*21.4*
ND	30	40	71.2	59.2	47.0	60	66.0	765.9		

Dimensions (overall)

Drives with heatsinks	W x H x D	
	mm	*in.*
ATV310H037N4S	72 x 143 x 130	*2.83 x 5.63 x 5.12*
ATV310H075N4S	72 x 143 x 140	*2.83 x 5.63 x 5.51*
ATV310HU15N4S **ATV310HU22N4S**	105 x 143 x 151	*4.13 x 5.63 x 5.94*
ATV310HU30N4S **ATV310HU40N4S** **ATV310HU55N4S**	140 x 184 x 151	*5.51 x 7.24 x 5.94*
ATV310HU75N4S **ATV310HD11N4S**	150 x 232 x 171	*5.91 x 9.13 x 6.73*

(1) These values are given for a nominal switching frequency of 4 kHz, for use in continuous operation.
If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz and 20% for 12 kHz.
The switching frequency can be set between 2 and 12 kHz for all ratings.
Above 4 kHz, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise.
See the derating curves in the User Manual, available on our local website.
(2) Typical value for the indicated motor power and for the maximum prospective line Isc.
• ≤ 4kW, network short circuit current Isc ≤ 5kA
• > 4kW, network short circuit current Isc : ≤ 22kA for Heavy duty, ≤ 5kA for Normal duty
(3) Weight of product without packaging.
(4) Values given for applications requiring significant overload (up to 150% for 60 s).
(5) Values given for applications requiring slight overload (up to 110% for 60 s).



ATV310H037N4S



ATV310HU15N4S



ATV310HU30N4S



ATV310HU75N4S

Drives for asynchronous motor - Three-phase supply voltage: 380…460 V 50/60 Hz

Motor			Line support			Easy Altivar 310				
Power indicated on rating plate *(1)*			Max. input current *(2)*		Apparent power	Maximum continuous output current *(In)* *(1)*	Maximum transient current for 60s	Dissipated power at maximum output current *(In)* *(1)*	Reference *(6)*	Weight *(3)* kg/*lb*
ND: Normal duty *(4)*										
HD: Heavy duty *(5)*			380 V	460 V	460 V	380 V				
	kW	HP	A	A	kVA	A	A	W		
HD	0.75	1	3.5	3.1	2.5	2.3	3.5	34.1	**ATV310H075N4S**	0.800/*1.760*
HD	1.5	2	6.5	5.4	4.3	4.1	6.2	60.4	**ATV310HU15N4S**	1.100/*2.430*
HD	2.2	3	8.8	7.2	5.7	5.5	8.3	75.5	**ATV310HU22N4S**	1.100/*2.430*
HD	3	4	11.1	9.2	7.3	7.1	10.7	90.8	**ATV310HU30N4S**	1.800/*3.970*
ND	4	5	14.2	11.6	9.3	8.9	9.8	120.4		
HD	4	5	13.7	11.4	9.1	9.5	14.3	115.1	**ATV310HU40N4S**	1.800/*3.970*
ND	5.5	7.5	18.0	14.9	15.1	12.1	13.3	158.3		
HD	5.5	7.5	21.3	14.3	11.4	12.6	18.9	162.4	**ATV310HU55N4S**	1.800/*3.970*
ND	7.5	10	23.0	19.0	15.1	16.0	17.6	201.9		
HD	7.5	10	26.6	22.4	17.8	17	25.5	241.2	**ATV310HU75N4S**	3.700/*8.160*
ND	11	15	29.5	24.8	19.4	22.8	25.1	317.8		
HD	11	15	36.1	30.4	24.2	24	36	337.1	**ATV310HD11N4S**	3.700/*8.160*
ND	15	20	38.6	32.5	25.4	30	33	407.0		

Dimensions (overall)

Drives with heatsinks	W x H x D	
	mm	*in.*
ATV310H037N4S	72 x 143 x 130	*2.83 x 5.63 x 5.12*
ATV310H075N4S	72 x 143 x 140	*2.83 x 5.63 x 5.51*
ATV310HU15N4S **ATV310HU22N4S**	105 x 143 x 151	*4.13 x 5.63 x 5.94*
ATV310HU30N4S **ATV310HU40N4S** **ATV310HU55N4S**	140 x 184 x 151	*5.51 x 7.24 x 5.94*
ATV310HU75N4S **ATV310HD11N4S**	150 x 232 x 171	*5.91 x 9.13 x 6.73*

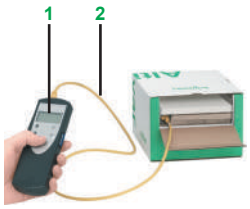
(1) These values are given for a nominal switching frequency of 4 kHz, for use in continuous operation.
If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz and 20% for 12 kHz.
The switching frequency can be set between 2 and 12 kHz for all ratings.
Above 4 kHz, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise.
See the derating curves in the User Manual, available on our local website.

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.
- *≤ 4kW, network short circuit current Isc ≤ 5kA*
- *> 4kW, network short circuit current Isc : ≤ 22kA for Heavy duty, ≤ 5kA for Normal duty*

(3) Weight of product without packaging.

(4) Values given for applications requiring significant overload (up to 150% for 60 s).

(5) Values given for applications requiring slight overload (up to 110% for 60 s).



Configuring the drive in its packaging with the Multi-Loader tool VW3A8121+ cordset VW3A8126

Configuration tools

Description	For drives	Reference	Weight kg/*lb*
Simple Loader, Multi-Loader configuration tools and associated cable			
Simple Loader tool For duplicating one drive configuration on another drive. The drives must be powered-up. The tool is supplied with a cordset equipped with 2 RJ45 connectors.	ATV310H●●●N4●	**VW3A8120**	–
Multi-Loader tool 1 For copying a configuration on a PC or drive and duplicating it on another drive. The drives do not need to be powered-up. Supplied with the tool: ■ 1 cordset equipped with 2 RJ45 connectors ■ 1 cordset equipped with a USB type A connector and a USB Mini-B type connector ■ 1 x 2 GB SD memory card ■ 1 female/female RJ45 adaptor ■ 4 AA/LR6 1.5 V batteries	ATV310H●●●N4●	**VW3A8121**	–
Cordset for Multi-Loader tool 2 For connecting the Multi-Loader tool to the Easy Altivar 310 drive in its packaging. Equipped with a non-locking RJ45 connector with special mechanical catch on the drive end and an RJ45 connector on the Multi-Loader end.	ATV310H●●●N4● in its packaging	**VW3A8126**	–



VW3A1006 with cover open: RUN, FWD/REV and STOP buttons accessible



VW3A1104R10

Remote display terminals and associated cordsets

Description	Degree of protection	For drives	Reference	Weight kg/*lb*
Remote display terminals For fixing the Human-Machine interface on an enclosure door with IP 54 or IP 65 degree of protection. A remote-fixing cordset VW3A1104R●● is also required.	IP 54	ATV310H●●●N4●	**VW3A1006**	0.250/*0.550*
	IP 65	ATV310H●●●N4●	**VW3A1007**	0.275/*0.610*
Remote-fixing cordsets equipped with 2 RJ45 connectors. For connecting the VW3 A1 006 or VW3A1007 remote display terminal to the Easy Altivar 310 drive.	Length: 1 m/*3.28 ft*	ATV310H●●●N4●	**VW3A1104R10**	0.050/*0.110*
	Length: 3 m/*9.84 ft*	ATV310H●●●N4●	**VW3A1104R30**	0.150/*0.330*

Dimensions (overall)

Remote display terminal	W x H x D	
	mm	*in.*
VW3A1006	50 x 70 x 22.7	*1.97 x 2.76 x 0.89*
VW3A1007	66 x 106 x 26.7	*2.6 x 4.17 x 1.05*

7



VW3A455●

Line chokes

For drives						Choke	
Drive Reference	**Duty**	**Line current without choke**		**Line current with choke**		**Reference**	**Weight kg/*lb***
		380 V	**460 V**	**380 V**	**460 V**		
		A	**A**	**A**	**A**		
ATV310H037N4●	HD	2.1	1.8	1.1	1	**VW3A4551**	1.500/*3.310*
ATV310H075N4●	HD	3.5	3.1	1.9	1.7		
ATV310HU15N4●	HD	6.5	5.4	3.5	2.9	**VW3A4552**	3.700/*8.160*
ATV310HU22N4●	HD	8.8	7.2	5.1	4.4		
ATV310HU30N4●	HD	11.1	9.2	6.6	5.6		
	ND	14.2	11.6	8.5	7.1		
ATV310HU40N4●	HD	13.7	11.4	8.5	7.7	**VW3A4553**	4.100/*9.040*
	ND	18	14.9	11.6	9.9		
ATV310HU55N4●	HD	21.3	14.3	11.6	9.9		
	ND	23	19	15.3	12.8		
ATV310HU75N4●	HD	26.6	22.4	16.1	14.2	**VW3A4554**	6.150/*13.230*
	ND	29.5	24.8	22.2	18.8		
ATV310HD11N4●	HD	36.1	30.4	22	18.3		
	ND	38.6	32.5	29.9	25		
ATV310HD15N4●	HD	46.5	38.5	28.9	24.4		
	ND	46.6	38.8	29	29		
ATV310HD18N4●	HD	55.3	45.8	36.4	31.6	**VW3A4555**	11.000/*24.251*
	ND	54.1	45.1	41.8	35.3		
ATV310HD22N4●	HD	64.2	53.2	42.4	36.3		
	ND	71.2	59.2	57.2	48.3	**VW3A4556**	*16.000/ 35.270*
ATV310HD15N4EF	HD	46.5	38.5	28.9	24.4	**VW3A4554**	*6.000/ 13.228*
	ND	46.6	38.8	29	29		
ATV310HD18N4EF	HD	55.3	45.8	36.4	31.6	**VW3A4555**	11.000/*24.251*
	ND	54.1	45.1	41.8	35.3		
ATV310HD22N4EF	HD	64.2	53.2	42.4	36.3		
	ND	71.2	59.2	57.2	48.3	**VW3A4556**	16.000/*35.270*



VW3A455●

Motor chokes *(1) (2)*

Drive Reference	Operation mode Duty	Rated current A	Power loss W	Choke Reference
ATV310H037N4●	HD	4	*45*	**VW3A4551**
ATV310H075N4●	HD			
ATV310HU15N4●	HD	10	*65*	**VW3A4552**
ATV310HU22N4●	HD			
ATV310HU30N4●	HD			
	ND			
ATV310HU40N4●	HD			
	ND	17	*75*	**VW3A4553**
ATV310HU55N4●	HD			
	ND			
ATV310HU75N4●	HD	31	*90*	**VW3A4554**
	ND			
ATV310HD11N4●	HD			
	ND			
ATV310HD15N4●	HD	60	*94*	**VW3A4555**
	ND			
ATV310HD18N4●	HD			
	ND			
ATV310HD22N4●	HD			
	ND	107	*260*	**VW3A4556**
ATV310HD15N4EF	HD	60	*94*	**VW3A4555**
	ND			
ATV310HD18N4EF	HD			
	ND			
ATV310HD22N4EF	HD			
		107	*260*	**VW3A4556**

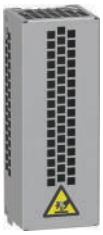
Dimensions (overall)

Line chokes or motor chokes	W x H x D	
	mm	*in.*
VW3A4551	100 x 135 x 60	*3.94 x 5.31 x 2.36*
VW3A4552, VW3A4553	130 x 155 x 90	*5.12 x 6.1 x 3.54*
VW3A4554	155 x 170 x 135	*6.1 x 6.69 x 5.31*
VW3A4555	180 x 210 x 160	*7.1 x 8.27 x 6.30*
VW3A4556	270 x 210 x 180	*10.63 x 8.27 x 7.09*

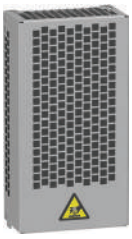
(1) Motor cable length given for a switching frequency of 4 kHz.
(2) With motor chokes, all the ranges drive can be used for maximum 100 m/328.08 ft with shielded motor cables and 200 m/656.17 ft with unshielded motor cables.



VW3A7723



VW3A7730



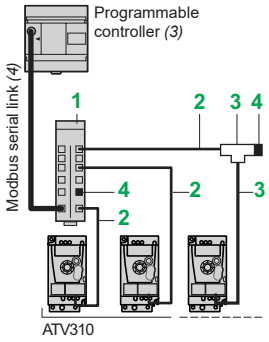
VW3A7732



LU9GC3



VW3A8306R03



Example of Modbus diagram with connection via splitter box and RJ45 connectors

Braking resistors

For drives	Minimum Ohmic value	Ohmic value at 20° C/68 °F	Power available at 50° C/122 °F (1)	Reference	Weight kg/lb
	Ω	Ω	W		
Not protected resistor (IP00) *(2)*					
ATV310HU15N4●	80	100	28	**VW3A7723**	0.600/*1.320*
ATV310HU22N4●	60				
ATV310HU30N4●	36	100	35	**VW3A7725**	0.850/*1.870*
ATV310HU40N4●	36				
Protected resistor (IP20 or 23)					
ATV310HU15N4●	80	100	100	**VW3A7730**	1.500/*3.306*
ATV310HU22N4●	60				
ATV310HU30N4●	36				
ATV310HU40N4●	36				
ATV310HU55N4●	28	60	160	**VW3A7731**	2.000/*4.409*
ATV310HU75N4●	28				
ATV310HD11N4●	28	28	300	**VW3A7732**	3.000/*6.613*
ATV310HD15N4●	16	16	960	**VW3A7733**	4.000/*8.818*
ATV310HD18N4●	10	16	960		
ATV310HD22N4●	10	16	960		
ATV310HD15N4EF	16	16	960		
ATV310HD18N4EF	10	16	960		
ATV310HD22N4EF	10	16	960		

Modbus serial link

Description		Item no.	Length m/ft	Unit reference	Weight kg/lb
Connection via splitter box and RJ45 connectors					
Modbus splitter box 10 RJ45 connectors and 1 screw terminal		1	–	**LU9GC3**	0.500/*1.100*
Cordsets for Modbus serial link equipped with 2 RJ45 connectors		2	0.3/*0.98*	**VW3A8306R03**	0.025/*0.060*
			1/*3.28*	**VW3A8306R10**	0.060/*0.060*
			3/*9.84*	**VW3A8306R30**	0.130/*0.290*
Modbus T-junction boxes (with integrated cable)		3	0.3/*0.98*	**VW3A8306TF03**	0.190/*0.420*
			1/*3.28*	**VW3A8306TF10**	0.210/*0.460*
Line terminators *(5) (6)* For RJ45 connector	R = 120 Ω C = 1 nf	4	–	**VW3A8306RC**	0.010/*0.020*
	R = 150 Ω	4	–	**VW3A8306R**	0.010/*0.020*

(1) Load factor for resistors: the value of the average power that can be dissipated at 50 °C from the resistor into the casing is determined for a load factor during braking that corresponds to the majority of normal applications.
(2) For not protected resistors, add a thermal overload device.
(3) Please refer to the programmable controller catalogue on our local website.
(4) Cable depends on the type of controller or PLC.
(5) Order in multiples of 2.
(6) Depends on the bus architecture.

7

Altivar 610

Altivar 610 - IP 20 drives, Accessories, Configuration and runtime tools



- Easy setup motor control of asynchronous motors and PM motors
- Power range coverage from 0.75kw to 315kw
- Multiple languages embedded enable to use easily for local customers
- European design low harmonic solution (THDi <10%) is available
- Reinforced hardware design for harsh environment

The **Easy Altivar 610** drive is an IP20 frequency inverter for three-phase asynchronous motors (up to 250 kW/400 HP) and synchronous motors (up to 160 kW/250 HP) between 380 and 460 V. Easy Altivar 610 drives can help improve equipment performance and reduce operating costs by optimizing energy consumption and user comfort.

Adapted to your applications, segments and operating environments

Water & wastewater | Oil & Gas | Energy Plant

IP20 three-phase 380...460 V drives with integrated category C3 EMC filter

Motor			Power supply to the power section				Easy Altivar 610			
Nominal power indicated on rating plate *(1)*			Max. input current *(2)*		Apparent power	Max. prospective line Isc	Maximum continuous current *(1)*		Maximum transient current for 60 s	Reference	Weight kg/*lb*
ND: Normal duty (3)			380 V	460 V	460 V						
HD: Heavy duty (4)											
	kW	*HP*	A	A	kVA	kA	A		A		
ND	0.75	*1*	3.1	2.6	2.1	5	2.2		2.4	**ATV610U07N4**	3.135/*6.9*
HD	0.37	*0.5*	1.7	1.4	1.1	5	1.5		2.3		
ND	1.5	*2*	5.7	4.8	3.8	5	4		4.4	**ATV610U15N4**	3.135/*6.9*
HD	0.75	*1*	3.1	2.6	2.1	5	2.2		3.3		
ND	2.2	*3*	7.8	6.5	5.2	5	5.6		6.2	**ATV610U22N4**	3.135/*6.9*
HD	1.5	*2*	5.6	4.6	3.7	5	4		6		
ND	3	–	10.1	8.4	6.7	5	7.2		7.9	**ATV610U30N4**	3.135/*6.9*
HD	2.2	*3*	7.6	6.4	5.1	5	5.6		8.4		
ND	4	*5*	8.8	7.9	6.3	5	9.3		10.2	**ATV610U40N4**	4.045/*8.9*
HD	3	–	7.2	6.2	4.9	5	7.2		10.8		
ND	5.5	*7.5*	11.6	10.5	8.4	22	12.7		14	**ATV610U55N4**	4.575/*10*
HD	4	*5*	8.9	7.9	6.3	22	9.3		14		
ND	7.5	*10*	14.7	12.8	10.2	22	15.8		17.4	**ATV610U75N4**	4.575/*10*
HD	5.5	*7.5*	11.3	10.2	8.1	22	12.7		19.1		
ND	11	*15*	22	19.6	15.6	22	23.5		25.9	**ATV610D11N4**	7.73/*17*
HD	7.5	*10*	16.4	14.6	11.6	22	16.5		24.8		
ND	15	*20*	29.4	26	20.7	22	31.7		34.9	**ATV610D15N4**	7.73/*17*
HD	11	*15*	23	20.8	16.6	22	23.5		35.3		
ND	18.5	*25*	37.2	33.5	26.7	22	39.2		43.1	**ATV610D18N4**	13.5/*29.8*
HD	15	*20*	31.6	28.3	22.6	22	31.7		47.6		



ATV610U07N4



ATV610D18N4



ATV610C11N4



ATV610C22N4

IP20 three-phase 380...460 V drives with integrated category C3 EMC filter

Motor			Power supply to the power section				Easy Altivar 610			
Nominal power indicated on rating plate *(1)*			Max. input current *(2)*		Apparent power	Max. prospective line ISC	Maximum continuous current *(1)*	Maximum transient current for 60 s	Reference	Weight kg/*lb*
ND: Normal duty (3)			380 V	460 V	460 V					
HD: Heavy duty (4)										
	kW	*HP*	A	A	kVA	kA	A	A		
ND	22	*30*	41.9	36.2	28.8	22	46.3	50.9	**ATV610D22N4**	13.5/*29.8*
HD	18.5	*25*	36	31.6	25.2	22	39.2	58.8		
ND	30	*40*	62.5	55.8	44.5	22	61.5	67.7	**ATV610D30N4**	25.5/*56.2*
HD	22	*30*	49.7	42.5	33.8	22	46.3	69.5		
ND	37	*50*	76.6	68.3	54.4	22	74.5	82	**ATV610D37N4**	25.5/*56.2*
HD	30	*40*	65.8	56.8	45.2	22	59.6	89.4		
ND	45	*60*	92.9	82.7	65.9	22	88	97	**ATV610D45N4**	25.5/*56.2*
HD	37	*50*	80.5	69.6	55.4	22	74.5	112		
ND	55	*75*	111.5	99.7	79.5	22	120	132	**ATV610D55N4**	53/*117*
HD	45	*60*	95.9	84	66.9	22	88	132		
ND	75	*100*	147.9	130.2	103.7	22	145	160	**ATV610D75N4**	53/*117*
HD	55	*75*	115.8	101.7	81	22	106	159		
ND	90	*125*	177.8	159.9	127.4	50	173	190	**ATV610D90N4**	53/*117*
HD	75	*100*	155.8	138.1	110	50	145	218		
ND	110	*150*	201	175.7	140	50	211	232	**ATV610C11N4** *(5)*	85.5/*188.5*
HD	90	*125*	170	149.1	118.8	50	173	260		
ND	132	*200*	237	203.8	162.4	50	250	275	**ATV610C13N4** *(5)*	85.5/*188.5*
HD	110	*150*	201	174.2	138.7	50	211	317		
ND	160	*250*	284	249.5	198.8	50	302	332	**ATV610C16N4** *(5)*	85.5/*188.5*
HD	132	*200*	237	205.9	164	50	250	375		
ND	220	*350*	397	341	272	50	427	470	**ATV610C22N4** *(5)*	173/*381*
HD	160	*250*	296	258	206	50	302	453		
ND	250	*400*	451	383	305	50	481	529	**ATV610C25N4** *(5)*	173/*381*
HD	200	*300*	365	313	249	50	370	555		
ND	315	*500*	571	480	369	50	616	678	**ATV610C31N4** *(5)*	180/*397*
HD	250	*400*	460	391	301	50	481	722		

*(1) These values are given for a nominal switching frequency of 4 kHz up to **ATV610D45N4**, or 2.5 kHz for **ATV610D55N4...C31N4** for use in continuous operation.*
*The switching frequency is adjustable from 2…12 kHz up to **ATV610D45N4**, or from 1…8 kHz for **ATV610D55N4...C31N4**. Above 2.5 or 4 kHz (depending on the rating), the drive will automatically reduce the switching frequency in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see the derating curves in the Installation Manual).*

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) Values given for applications requiring a slight overload (up to 110% for 60 s or 120% for 20 s).

(4) Values given for applications requiring a slight overload (up to 150% for 60 s).

(5) This drive is IP00, you can order an IP21 conformity kit as option.



ATV610U07N4Z



ATV610D11N4Z



ATV610D18N4Z

IP20 three-phase 380...460 V drives with integrated category C3 EMC filter

Motor			Power supply to the power section				Easy Altivar 610			
Nominal power indicated on rating plate *(1)*			Max. input current *(2)*		Apparent power	Max. prospective line ISC	Maximum continuous current *(1)*	Maximum transient current for 60 s	Reference	Weight kg/*lb*
ND: Normal duty (3)			380 V	460 V	460 V					
HD: Heavy duty (4)										
	kW	*HP*	A	A	kVA	kA	A	A		
ND	0.75	*1*	3.1	2.6	2.1	5	2.2	2.4	**ATV610U07N4Z●**	2.985/*6.58*
HD	0.37	*0.5*	1.7	1.4	1.1	5	1.5	2.3		
ND	1.5	*2*	5.7	4.8	3.8	5	4	4.4	**ATV610U15N4Z●**	2.985/*6.58*
HD	0.75	*1*	3.1	2.6	2.1	5	2.2	3.3		
ND	2.2	*3*	7.8	6.5	5.2	5	5.6	6.2	**ATV610U22N4Z●**	2.985/*6.58*
HD	1.5	*2*	5.6	4.6	3.7	5	4	6		
ND	3	–	10.1	8.4	6.7	5	7.2	7.9	**ATV610U30N4Z●**	2.985/*6.58*
HD	2.2	*3*	7.6	6.4	5.1	5	5.6	8.4		
ND	4	*5*	8.8	7.9	6.3	5	9.3	10.2	**ATV610U40N4Z●**	3.885/*8.565*
HD	3	–	7.2	6.2	4.9	5	7.2	10.8		
ND	5.5	*7.5*	11.6	10.5	8.4	22	12.7	14	**ATV610U55N4Z●**	4.415/*9.73*
HD	4	*5*	8.9	7.9	6.3	22	9.3	14		
ND	7.5	*10*	14.7	12.8	10.2	22	15.8	17.4	**ATV610U75N4Z●**	4.415/*9.73*
HD	5.5	*7.5*	11.3	10.2	8.1	22	12.7	19.1		
ND	11	*15*	22	19.6	15.6	22	23.5	25.9	**ATV610D11N4Z●**	7.540/*16.62*
HD	7.5	*10*	16.4	14.6	11.6	22	16.5	24.8		
ND	15	*20*	29.4	26	20.7	22	31.7	34.9	**ATV610D15N4Z●**	7.540/*16.62*
HD	11	*15*	23	20.8	16.6	22	23.5	35.3		
ND	18.5	*25*	37.2	33.5	26.7	22	39.2	43.1	**ATV610D18N4Z●**	13.300/*29.32*
HD	15	*20*	31.6	28.3	22.6	22	31.7	47.6		
ND	22	*30*	41.9	36.2	28.8	22	46.3	50.9	**ATV610D22N4Z●**	13.300/*29.32*
HD	18.5	*25*	36	31.6	25.2	22	39.2	58.8		
ND	30	*40*	62.5	55.8	44.5	22	61.5	67.7	**ATV610D30N4Z●**	25.295/*55.77*
HD	22	*30*	49.7	42.5	33.8	22	46.3	69.5		
ND	37	*50*	76.6	68.3	54.4	22	74.5	82	**ATV610D37N4Z●**	25.295/*55.77*
HD	30	*40*	65.8	56.8	45.2	22	59.6	89.4		
ND	45	*60*	92.9	82.7	65.9	22	88	97	**ATV610D45N4Z●**	25.295/*55.77*
HD	37	*50*	80.5	69.6	55.4	22	74.5	112		
ND	55	*75*	111.5	99.7	79.5	22	120	132	**ATV610D55N4Z●**	52.045/*114.7*
HD	45	*60*	95.9	84	66.9	22	88	132		
ND	75	*100*	147.9	130.2	103.7	22	145	160	**ATV610D75N4Z●**	52.045/*114.7*
HD	55	*75*	115.8	101.7	81	22	106	159		
ND	90	*125*	177.8	159.9	127.4	50	173	190	**ATV610D90N4Z●**	52.045/*114.7*
HD	75	*100*	155.8	138.1	110	50	145	218		
ND	110	*150*	201	175.7	140	50	211	232	**ATV610C11N4Z●** *(5)*	85.445/*188.4*
HD	90	*125*	170	149.1	118.8	50	173	260		
ND	132	*200*	237	203.8	162.4	50	250	275	**ATV610C13N4Z●** *(5)*	85.445/*188.4*
HD	110	*150*	201	174.2	138.7	50	211	317		
ND	160	*250*	284	249.5	198.8	50	302	332	**ATV610C16N4Z●** *(5)*	85.445/*188.4*
HD	132	*200*	237	205.9	164	50	250	375		

*(1) These values are given for a nominal switching frequency of 4 kHz up to **ATV610D45N4Z●**, or 2.5 kHz for **ATV610D55N4Z●...C16N4Z●** for use in continuous operation.*
*The switching frequency is adjustable from 2…12 kHz up to **ATV610D45N4Z●**, or from 1…8 kHz for **ATV610D55N4Z●...C16N4Z●**. Above 2.5 or 4 kHz (depending on the rating), the drive will automatically reduce the switching frequency in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see the derating curves Installation Manual).*

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) Values given for applications requiring a slight overload (up to 110% for 60 s or 120% for 20 s).

(4) Values given for applications requiring a slight overload (up to 150% for 60 s).

(5) This drive is IP00, you can order an IP21 conformity kit as option.


VW3A9708


VW3A9708


VW3A1114


ZB5AZ905


VW3A1104R10


VW3A3203


VW3A3204


VW3A3607

Accessories for mounting of variable speed drives

IP conformity kit

For use with variable speed drives	IP rating	Power kW	Power *HP*	Reference
ATV610C11N4●…C16N4●	IP21	110...160	*149...216*	**VW3A9704**
ATV610C22N4...C25N4	IP21	220...250	*350...400*	**VW3A9707**
ATV610C31N4	IP21	315	*500*	**VW3A9708**

Communication buses and networks

References

Description	Reference	Weight kg/*lb*
Plain text display terminal	**VW3A1113**	0.200/*0.441*

Remote mounting kit

References

Description	Length m/*ft*	IP degree of protection	Reference	Weight kg/*lb*
Basic keypad door mounting kit Order with remote-mounting cordset VW3A1104R●●●	–	43	**VW3A1114**	–
Tightening tool for remote mounting kit	–	–	**ZB5AZ905**	0.016/*0.035*
Remote-mounting cordset equipped with 2 RJ45 connectors	1/*3.28*	–	**VW3A1104R10**	0.050/*0.110*
	3/*9.84*	–	**VW3A1104R30**	0.150/*0.331*
	5/*16.40*	–	**VW3A1104R50**	0.250/*0.551*
	10/*32.81*	–	**VW3A1104R100**	0.500/*1.102*

I/O modules (option)

References

Description	I/O type: Discrete inputs	Discrete outputs	Analog inputs	Relay outputs	Reference	Weight kg/*lb*
Extended I/O module	6	2	2 *(1)*	–	**VW3A3203**	–
Extended relay module	–	–	–	3 *(2)*	**VW3A3204**	

PROFIBUS DP V1 optional communication module

References

Description	Reference	Weight kg/*lb*
PROFIBUS DP communication module Port: 1x 9-way female SUB-D connector Conforming to PROFIBUS DP V1 Profiles supported: ■ CiA 402 drive ■ Profidrive Offers several message handling modes based on DP V1	**VW3A3607**	0.140/*0.309*
IP20 straight connectors *(1)* for Profibus module (SUB-D connection)	**LU9AD7**	–

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08. EasyPact protection of distribution system

EasyPact CVS

Molded-case circuit breakers from 16 to 630 A, with adjustable settings.



- Reduces thermal stress on electrical networks, extending cable and installation life.
- Rated current: 16 to 630 A; breaking capacity: 25 to 50 kA at 400/415 V.
- Available in 3 and 4 pole versions, 3 frame sizes, with thermal-magnetic or electronic protection.
- Adjustable thermal protection: 0.7 to 1 (TMD) or 0.5 to 1 (electronic) times the trip unit rating.
- Suitable for isolation and earth-leakage protection with Vigi Module.
- Meets IEC 60947-2, CCC, EAC, and other certifications.

EasyPact CVS is designed to meet the requirements of most common protection applications in small—to medium-sized buildings. It delivers a high level of performance and cost-saving functionality.
Its double-break mechanism ensures high fault current limitation

- Reduces thermal stresses on the electrical distribution network
- Increases the life of cables and installation.

Adapted to your applications, segments and operating environments

Buildings | Industry | Power



LV525303



LV510310



Find more details and other references in the EasyPact CVS catalog

EasyPact CVS100/160/250B, 25 kA 380/415 V - With TM-D thermal-magnetic trip unit

	Rating	Poles	
		3P 3d	4P 3d
EasyPact CVS100B	TM16D	LV510300	LV510310
	TM25D	LV510301	LV510311
	TM32D	LV510302	LV510312
	TM40D	LV510303	LV510313
	TM50D	LV510304	LV510314
	TM63D	LV510305	LV510315
EasyPact CVS160B	TM100D	LV516301	LV516311
	TM125D	LV516302	LV516312
	TM160D	LV516303	LV516313
EasyPact CVS250B	TM200D	LV525302	LV525312
	TM250D	LV525303	LV525313

EasyPact CVS 100/160/250F, 36kA at 380/415 V - With MA magnetic trip unit

	Rating	Poles	
		3P 3d	
EasyPact CVS 100F	MA2.5	LV510440	
	MA6.3	LV510441	
	MA12.5	LV510442	
	MA25	LV510443	
	MA50	LV510444	
	MA100	LV510445	
EasyPact CVS 160F	MA100	LV516439	
	MA150	LV516440	
EasyPact CVS 250F	MA150	–	
	MA220	LV525439	

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LV540305


LV540308


LV540506












EasyPact CVS400/630F - With TM-D thermal-magnetic trip unit

Type	Rating	Poles	
		3P 3d	4P 3d
EasyPact CVS400F (36 kA at 380/415 V)	TM320D	LV540305	LV540308
	TM400D	LV540306	LV540309
CVS630F (36 kA at 380/415 V)	TM500D	LV563305	LV563308
	TM630D	LV563307	LV563310

EasyPact CVS400/630F/N - With MA magnetic trip unit

Type	Rating	Poles
		3P 3d
EasyPact CVS400F (36 kA at 380/415 V)	MA320	LV540550
EasyPact CVS400N (50 kA at 380/415 V)	MA320	LV540552
EasyPact CVS630F (36 kA at 380/415 V)	MA500	LV563550
EasyPact CVS630N (50 kA at 380/415 V)	MA500	LV563552

EasyPact CVS400/630F - ETS 2.3 electronic trip unit (LS_0I protection)

Type	Poles	
	3P 3d	4P 3d, 4d, 3d + N/2
EasyPact CVS400F (36 kA at 380/415 V) - 400 A	LV540505	LV540506
EasyPact CVS630F (36 kA at 380/415 V) - 630 A	LV563505	LV563506

Connection accessories (Cu or Al)

Description			Reference
Aluminium connector	1x (35 to 300 mm²)	Set of 3	LV432479
		Set of 4	LV432480
	2x (35 to 240 mm²)	Set of 3	LV432481
		Set of 4	LV432482
Voltage plug for aluminium connector 1 or 2 cables		Set of 10	LV429348
Spreaders	52.5 mm	3P	LV432490
		4P	LV432491
	70 mm	3P	LV432492
		4P	LV432493
Insulation accessories	Short terminal shield, 45 mm (1 piece)	3P	LV432591
		4P	LV432592
	Long terminal shield, 45 mm (1 piece)	3P	LV432593
		4P	LV432594
	Interphase barriers	Set of 6	LV432570
	Long terminal shiled for spreaders, 52, 5mm (1 piece) (supplied with insulating plate)	3P	LV432595
		4P	LV432596
	2 insulating screens (70 mm pitch)	3P	LV432578
		4P	LV432579

Rotary handles

Description	Reference
Direct rotary handle - With standard black handle	LV432597
Standard extended rotary handle	LV432598

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09. Easy TeSys motor control and protection

Easy TeSys 3-pole contactors from 6 to 630 A



Easy TeSys Control - 3-pole contactors

Size		1					2		3		
Rated operational current AC-3 (A) *(1)*		6	9	12	18	25	32	38	40	50	65
Rated operational current AC-3e		6	9	12	18	25	32	38	40	50	65
Rated operational current AC-1 (A) *(2)*		20	25		32	36	50		60	70	80
Rated operational power in AC-3 (kW)	220/230 V	1.1	2.2	3	4	5.5	7.5	9	11	15	18.5
	380/400 V	2.2	4	5.5	7.5	11	15	18.5	18.5	22	30
	415/440 V	2.2	4	5.5	9	11	15	18.5	22	25/30	37
	500 V	3	5.5	7.5	10	15	18.5	18.5	22	30	37
	660/690 V	3	5.5	7.5	10	15	18.5	18.5	30	33	37
Width (mm)		45				45.5	56		75		
Coil rated operating voltage		24...440 V AC; 24 V DC									
Auxiliary built in contact		1 NO or 1 NC							1 NO + 1 NC		
Reference		**LC1E06**	**LC1E09**	**LC1E12**	**LC1E18**	**LC1E25**	**LC1E32**	**LC1E38**	**LC1E40**	**LC1E50**	**LC1E65**



Size		4		5		6		7		8	9
Rated operational current AC-3 (A) *(1)*		80	95	120	160	200	250	300	400	500	630
Rated operational current AC-3e		80	95	96	100	175	190	265	330	400	500
Rated operational current AC-1 (A) *(2)*		110	120	150	200	250	300	320	500	700	1000
Rated operational power in AC-3 (kW)	220/230 V	22	25	37	45	55	75	90	110	147	185
	380/400 V	37	45	55	75	90	132	160	200	250	335
	415/440 V	45	45	59	80	100	140	160/185	220/250	280/295	375/400
	500 V	45	55	75	90	110	160	200	257	355	400
	660/690 V	45	45	80	100	110	160	220	280	335	450
Width (mm)		85		120		168.5		213		233	309
Coil rated operating voltage		24...440 V AC;24 V DC							24...440 V AC		
Auxiliary built in contact		1 NO + 1 NC				–					
Reference		**LC1E80**	**LC1E95**	**LC1E120**	**LC1E160**	**LC1E200**	**LC1E250**	**LC1E300**	**LC1E400**	**LC1E500**	**LC1E360**	**LC1E630**

(1) Class AC-3: squirrel-cage motors with breaking taking place with the motor running.
(2) Class AC-1: AC loads with cos φ at least equal to 0.95 (resistive load, heating, distribution, etc.).



Find more details and other references in the
EasyTesys catalog

Commercial reference numbering system

EasyTeSys 3-pole contactors - Commercial reference numbering system

LC1E ●●● ●●● ● ●

Frequency	Code
50 Hz	5
60 Hz	6
50/60 Hz	7
DC	D

Coil voltage *(1)*	Code
24 V	B
48 V	E
110 V	F
220 V	M
230 V	P
240 V	U
380 V	Q
400 V	V
415 V	N
440 V	R

Rated operation current (AC-3/AC-3e)	Auxiliary contact configuration	Code
EasyTeSys 3-pole		
06...38	1NO (or 1 NC)	10 (or 01)
40...160	1NO+1NC	none
200...630	No auxiliary contact	none

Rated operation current (AC-3/AC-3e)	Code
EasyTeSys 3-pole	
06...630	06...630

Type	Designation
Contactor	Easy TeSys

Contactor: how to determine the full commercial reference ?
Example 1: you need a 32 A contactor, 1 NC auxiliary contact, 24 V - 50 Hz, coil ⇨ **LC1E3201B5**
Example 2: you need a 120 A contactor, 1 NC + NO auxiliary contact, 220 V - 50 Hz, coil ⇨ **LC1E120M5**

Available coil voltage code for 3-pole contactors

		24	48	110	220	230	240	380	415	440
LC1E06-300	50 Hz	B5	E5	F5	M5	–	U5	Q5	N5	R5
	60 Hz	B6	–	F6	M6	–	–	Q6	–	R6
LC1E06-95	50/60 Hz	B7	E7	F7	M7	P7	–	Q7	–	–
	DC	BD	–	–	–	–	–	–	–	–
LC1E120-300	50/60 Hz	–	–	F7	M7	–	U7	Q7	–	–
LC1E400-630	50/60 Hz	–	E7	F7	M7	–	U7	Q7	N7	R7

Contactor: how to determine the full commercial reference ?

Example: **LC1E 12 10 U 5** — **ref. LC1E1210U5**

5	50 Hz
Coil voltage code	240 V
Auxiliary contact configuration *(2)*	01 1NC 10 1NO
Rated operation current AC-3/AC-3e	12 A
Contactor	Easy TeSys

(1) For 3-pole contactors, please refer the previous page.
(2) Example up to LC1E38 For details, please see above table.

Easy TeSys Control Contactors - 3 pole from 6 A to 630 A
Power Characteristics

Pole Characteristics

Contactor type				LC1E06	LC1E09	LC1E12	LC1E18	LC1E25	LC1E32	LC1E38	LC1E40	LC1E50	LC1E65
Number of poles				3									
Rated operational current (Ie) (Ue ≤ 440 V)	In AC-3 (θ ≤ 55°C)		A	6	9	12	18	25	32	38	40	50	65
	In Ac-3e(θ ≤ 55°C)			6	9	12	18	25	32	38	40	50	65
	In AC-1 (θ ≤ 55°C)			20	25		32	32	50		60	70	80
	In AC-1 (θ ≤ 40°C)			–									
Rated operational voltage (Ue)	Up to		V	690									
Frequency limits of the operational current			Hz	50/60									
Conventional thermal current (Ith)	θ ≤ 55°C		A	20	25		32	32	50		60	70	80
	θ ≤ 40°C			–									
Rated breaking capacity at 440 V	Conforming to IEC 60947		A	51	76.5	102	153	212.5	272	323	340	425	552.5
Rated making capacity at 440 V	Conforming to IEC 60947-4-1		A	78	117	156	234	325	416	494	520	650	845
Permissible short time rating No current flowing for preceding 15 minutes with θ ≤ 40°C	10 s		A	80	105		145	240	260	310	320	400	520
	1 min			45	61		84	120	138	150	165	208	260
	10 min			20	30		40	50	60		72	84	110
Maximum permissive current No current flowing for previous 60 minutes, at θ ≤ 40°C	For 10 s		A	–									
Protection by fuses against short-circuits (U ≤ 690 V)	Without thermal overload relay gG fuse	Type 1	A	12	20	25	35	40	63		80	100	125
	With thermal overload relay			For corresponding aM or gG fuse ratings corresponding to the associated LRE● thermal overload relay									
Average impedance per pole	At Ith and 50 Hz		mΩ	2.5				2.5			1.5		1
Power dissipation per pole for the above operational currents	AC-3		W	0.09	0.20	0.36	0.81	1.6	2.0	2.9	2.4	3.8	4.2
	AC-1			1.0	1.6		2.6	3.2	5.0		5.4	7.4	6.4
Electrical durability	AC-3 (Ue ≤ 440 V)		Million cycles	1.4			1.2		1	0.9			
	AC-1 (Ue ≤ 440 V)			0.15		0.3		0.35					
Mechanical durability				10					8		5		

Power Circuit Connections

Contactor type				LC1E06	LC1E09	LC1E12	LC1E18	LC1E25	LC1E32	LC1E38	LC1E40	LC1E50	LC1E65
Connection maximum c.s.a.													
Flexible cable with cable end	1 conductor		mm^2	1...4				1...6			2.5...25		
	2 conductors			1...2.5				1...4			2.5...10		
Flexible cable without cable end	1 conductor		mm^2	1...4			1.5...6		1.5...10		2.5...25		
	2 conductors			1...4			1.5...6		1.5...6		2.5...16		
Solid cable without cable end	1 conductor		mm^2	1...4			1.5...6		1.5...10		2.5...25		
	2 conductors			1...4			1.5...6		1.5...6		2.5...16		
Cable with lug			mm	–									
Bar	Number of bars			–									
	Bar	mm x mm		–									
Bolt diameter	1 conductor		mm	–									
Tightening torque with AC Coil	Power circuit connection		N.m	1.2 ~ 1.4				1.7 ~ 2.0	1.85 ~ 2.15		5 ~ 5.8		
Tightening torque with DC Coil	Power circuit connection		N.m	1.6 ~ 1.8				1.6 ~ 1.8	2.4 ~ 2.7		5 ~ 5.8		
Tool				Philips N°2 or Pozidriv N°2 or Ø6mm flat							Ø8mm flat		

Easy TeSys Control Contactors - 3 pole from 6 A to 630 A
Power Characteristics

Pole Characteristics

Contactor type				LC1E80	LC1E95	LC1E120	LC1E160	LC1E200	LC1E250	LC1E300	LC1E400	LC1E500	LC1E630
Number of poles				3									
Rated operational current (Ie) (Ue ≤ 440 V)	In AC-3 (θ ≤ 55°C)		A	80	95	120	160	200	250	300	400	500	630
	In Ac-3e(θ ≤ 55°C)			80	95	96	100	175	190	265	330	400	500
	In AC-1 (θ ≤ 55°C)			110	120	–							
	In AC-1 (θ ≤ 40°C)					150	200	250	300	320	500	700	1000
Rated operational voltage (Ue)	Up to		V	690									
Frequency limits of the operational current			Hz	50/60									
Conventional thermal current (Ith)	θ ≤ 55°C		A	110	120	–							
	θ ≤ 40°C					150	200	250	300	320	500	700	1000
Rated breaking capacity at 440 V	Conforming to IEC 60947		A	680	807.5	960	1280	1600	2000	2400	3200	4000	5040
Rated making capacity at 440 V	Conforming to IEC 60947-4-1		A	960	1140	1200	1600	2000	2500	3000	4000	5000	6300
Permissible short time rating No current flowing for preceding 15 minutes with θ ≤ 40°C	10 s		A	640	800	950	1200	1500	1800	2650	3600	4200	5050
	1 min			320	400	550	580	740	850	1300	1700	2400	3400
	10 min			135		250	250	400	440	750	1000	1200	1600
Maximum permissive current No current flowing for previous 60 minutes, at θ ≤ 40°C	For 10 s		A	–		1100	1400	1500	1800	2650	3600	4200	5050
Protection by fuses against short-circuits (U ≤ 690 V)	Without thermal overload relay gG fuse	Type 1	A	160		250	315			500	630	800	800
	With thermal overload relay			For corresponding aM or gG fuse ratings corresponding to the associated LRE● thermal overload relay									
Average impedance per pole	At Ith and 50 Hz		mΩ	0.8		0.6		0.33	0.32	0.3	0.26	0.18	0.12
Power dissipation per pole for the above operational currents	AC-3		W	5.1	7.2	8.6	15	13	20	27	42	45	48
	AC-1			9.7	12	14	24	21	29	31	65	88	120
Electrical durability	AC-3 (Ue ≤ 440 V)		Million cycles			0.8		0.5	0.7	0.5	0.6	0.6	0.6
	AC-1 (Ue ≤ 440 V)					0.25		0.2		0.4	0.25	0.25	0.2
Mechanical durability				3		4		5			4	4	4

Power Circuit Connections

Contactor type				LC1E80	LC1E95	LC1E120	LC1E160	LC1E200	LC1E250	LC1E300	LC1E400	LC1E500	LC1E630
Connection maximum c.s.a.													
Flexible cable with cable end	1 conductor		mm^2	4...50		10...120		–					
	2 conductors			4...16		10...120 + 10...50		–					
Flexible cable without cable end	1 conductor		mm^2	4...50		10...120		–					
	2 conductors			4...25		10...120 + 10...50		–					
Solid cable without cable end	1 conductor		mm^2	4...50		10...120		–					
	2 conductors			4...25		10...120 + 10...50		–					
Cable with lug			mm					150	185	240	2 x 150	2 x 240	–
Bar	Number of bars							2					
	Bar	mm x mm						3 x 25	4 x 32	5 x 30	30 x 5	40 x 5	60 x 5
Bolt diameter	1 conductor		mm					M8	M10				M12
Tightening torque with AC Coil	Power circuit connection		N.m	12 ~ 13.5		12 ~ 13.5		18 ~ 21	35 ~ 37				58 ~ 60
Tightening torque with DC Coil	Power circuit connection		N.m	12 ~ 13.5		/		/	/				/
Tool				Allen key n°4		Allen key n°4		Wrench					







Accessories for Motor Reverse Assembly - 3-pole Accessories for LC1E Contactor with AC supply

Contactors with screw clamp terminals

Using 2 identical contactors	Set of power connections 1		Mechanical interlock 2	
	Reference	Weight kg	Reference	Weight kg
Mechanical interlock				
LC1E06...E12	**LAEP1**	0.020	**LAEM1**	0.030
LC1E18/E25	**LAEP12**	0.026	**LAEM1**	0.030
LC1E32/E38	**LAEP2**	0.040	**LAEM1**	0.030
LC1E40...E65	**LAEP3**	0.230	**LAEM1**	0.030
LC1E80/E95	**LAEP4**	0.465	**LAEM4**	0.095
LC1E120/E160	– (DIY) (1)		**LAEM5**	0.300
LC1E200/E250	– (DIY) (1)		**LAEM6**	0.110
LC1E300	– (DIY) (1)		**LAEM7**	0.250
LC1E400	– (DIY) (1)		**LAEM7**	0.250
LC1E500	– (DIY) (1)		**LAEM7**	0.250
LC1E630	– (DIY) (1)		**LAEM8**	0.270

(1) *DIY : Do It Yourself.*



RC circuits (Resistor-Capacitor) 3

Mounting	For use with contactor		Reference	Weight
	Rating	Type		
		V~		kg
Screw mounting(1)	LC1E06...E95	24...48	**LAERCE**	0.025
		50...127	**LAERCG**	0.025
		110...240	**LAERCU**	0.025
		380...415	**LAERCN**	0.025

- Effective protection for circuits highly sensitive to high frequency interference and transcient generated when the contactor coil is switched off. For use only in cases where the voltage is virtually sinusoidal, i.e. less than 5 % total harmonic distortion.
- Voltage limited to 3 Uc max. and oscillating frequency limited to 400 Hz max.
- Slight increase in drop-out time (1.2 to 2 times the normal time).

Easy TeSys contactors - Accessories for LC1E contactor





Instantaneous auxiliary contact blocks for connection by screw lamps terminals (For use in normal operating environment)				
Clip-on mounting	Front			
Number of contacts per block	1 NO / 1 NC	2 NO	2 NC	2 NO / 2 NC
Reference 1	**LAEN11**	**LAEN20**	**LAEN02**	**LAEN22**

Time delay auxiliary contact blocks for connection by screw clamp terminals 8 A - 690 V	
Clip-on mounting	Front
Number of contacts per block	1 NO / 1 NC
Time delay type	On-delay
Setting range	1...30 s
Reference 2	**LAETSD** *(For use only LC1E25 to LC1E630)*

Instantaneous and time delay contact characteristics							
Contact block type		**LAEN11, 20, 02, 22**			**LAETSD**		
Number of contacts		2 or 4			2		
Rated operational voltage (Ue)	Up to **(V)**	690			690		
Rated insulation voltage (Ui)	Conforming to IEC 60947-5-1 **(V)**	690			690		
Conventional thermal current (Ith)	For ambient temperature θ ≤ 60 °C **(A)**	10			10		
Minimum switching capacity	U min **(V)**	17			17		
	I min **(mA)**	5			5		
Short-circuit protection	Conforming to IEC 60947-5-1 **(A)**	10			10		
Rated making capacity	Conforming to IEC 60947-5-1 **(Irms)**	∿ 140			∿ 140		
Short-time rating	Permissible for 1 s **(A)**	100			100		
	Permissible for 500 ms **(A)**	120			120		
	Permissible for 100 ms **(A)**	140			140		
Insulation resistance	mΩ	> 10			> 10		
Non-overlap time	Guaranteed between NC and NO contacts **(ms)**	1.5 (on energisation and on de-energisation)					
Overlap time	Guaranteed between LAE N22 NC and NO contacts **(ms)**	–			–		
Time delay	Ambient air temperature for operation **(°C)**	–			-20...+70		
	Repeat accuracy **(°C)**	–			±2 %		
	Drift up to 0.5 million operating cycles **(°C)**	–			+15 %		
	Drift depending on ambient air temperature **(°C)**	–			0.25 % per °C		
Mechanical durability	In millions of operating cycles	10			4		
Rated operational power of contacts (Conforming to IEC 60947-5-1)	a.c. supply categories AC14/15 **(V)**	24	48	115	230	400	440
	1 million operating cycles **(VA)**	60	120	280	560	960	1050
	3 million operating cycles **(VA)**	16	32	80	160	280	300
	10 million operating cycles **(VA)**	4	8	20	4	70	80

Environment		
Conforming to standard		IEC 60947-5-1
Product certifications		EAC
Protective treatment	Conforming to IEC 60068	"TH"
Degree of protection	Conforming to IEC 60529	IP2X
Ambiant air temperature	Storage **(°C)**	-60...+80
	Operation **(°C)**	-5...+55
	Permissible for operation at Uc **(°C)**	-20...+70
Maximum operating altitude	Without derating **(m)**	3000
Connection by cable	Philips N° 2 and Ø 6 mm. Flexible or solid cable with or without cable end **(mm²)**	Min: 1 x 1 Max: 2 x 2.5
Tightening torque	**(N.m)**	1.2

Easy TeSys Protect Thermal overload relays



Easy TeSys Protect Thermal overload relays - Compatible with Contactor (size 1 & 2)

Reference	Possible Imax Calibration	Compatible with Contactor (size 1 & 2) Com. Ref.						
		LC1E06	LC1E09	LC1E12	LC1E18	LC1E25	LC1E32	LC1E38
LRE01	0.10…0.16 A	■	■	■	■	■	■	■
LRE02	0.16…0.25 A	■	■	■	■	■	■	■
LRE03	0.25…0.40 A	■	■	■	■	■	■	■
LRE04	0.40…0.63 A	■	■	■	■	■	■	■
LRE05	0.63…1 A	■	■	■	■	■	■	■
LRE06	1…1.6 A	■	■	■	■	■	■	■
LRE07	1.6…2.5 A	■	■	■	■	■	■	■
LRE08	2.5…4 A	■	■	■	■	■	■	■
LRE10	4…6 A	■	■	■	■	■	■	■
LRE12	5.5…8 A		■	■	■	■	■	■
LRE14	7…10 A		■	■	■	■	■	■
LRE16	9 …13 A			■	■	■	■	■
LRE21	12…18 A				■	■	■	■
LRE22	16…24 A					■	■	■
LRE32	23…32 A					■	■	■
LRE35	30…38 A							■



Easy TeSys Protect Thermal overload relays - Compatible with Contactor (size 3 & 4)

Reference	Possible Imax Calibration	Compatible with Contactor (size 3 & 4) Com. Ref.				
		LC1E40	LC1E50	LC1E65	LC1E80	LC1E95
LRE322	17…25 A	■	■	■	■	■
LRE353	23…32 A	■	■	■	■	■
LRE355	30…40 A	■	■	■	■	■
LRE357	37…50 A		■	■	■	■
LRE359	48…65 A			■	■	■
LRE361	55…70 A				■	■
LRE363	63…80 A				■	■
LRE365	80…104 A					■



Easy TeSys Protect Thermal overload relays - Compatible with Contactor (size 5, 6, 7, 8 and 9)

Reference	Possible Imax Calibration	Compatible with Contactor (size 5, 6, 7, 8, and 9) Com. Ref.							
		LC1E120	LC1E160	LC1E200	LC1E250	LC1E300	LC1E400	LC1E500	LC1E630
LRE480	51…81A	■	■	□	□	□	□	□	□
LRE481	62…99A	■	■	□	□	□	□	□	□
LRE482	84…135A	■	■	□	□	□	□	□	□
LRE483	124…198A		□	■	□	□	□	□	□
LRE484	146…234A			□	■	■	■	□	□
LRE485	174…279A			□	■	■	■	□	□
LRE486	208…333A				■	■	■	□	□
LRE487	259…414A					■	■	□	□
LRE488	321…513A						□	■	□
LRE489	394…630A							□	■

Note:

■ *Means the relay can match with contactor both in electrical and mechanical.*

□ *Means the relay can match with contactor only in electrical (can not directly mounting).*

Common characteristics

> Class: 10 A.

> Operating voltage: max. 690 V AC.

Easy TeSys 3-pole contactors

Power circuit characteristics

Relay type	Reference		LRE 01...21	LRE 22...35	LRE 322...365	LRE 480…482	LRE 483	LRE 484	LRE 485…487	LRE 488	LRE 489
	Size		1		2	3				4	
Tripping class	Conforming to IEC 60947-4-1		10 A								
Rated insulation voltage	Conforming to IEC 60947-4-1	V	690								
Rated impulse withstand voltage (Uimp)		kV	6								
Frequency limits	Of the operating current	Hz	50...60								
Setting range	Depending on model	A	0.1...18	16...38	17...104	51...630					
Power Circuit Connections											
Connection by screw clamp terminals			Minimum/maximum c.s.a.								
	Flexible cable without cable end 1 conductor	mm²	1.5...6	2.5...10	4...35	–					
	Flexible cable with cable end 1 conductor		1...4	1.5...6	4...35	–					
	Solid cable without cable end 1 conductor		1...6	2.5...10	4...35	–					
	Tightening torque	N.m	1.7	2.5	9	–					
Connection by bars or lugs											
Pitch	Without spreaders	mm	–			34.8	40	48	48	55	80
Bars or cables with lugs	Cross section		–			3X18	3X20	3X25	4X25	5x30	6X40
Screws	Type		–			M8	M8	M10	M10	M10	M12
	Tightening torque	N.m	–			27.5	27.5	35	35	35	58
Auxiliary Contact Characteristics											
Conventional thermal current		A	5								
Max. sealed consumption of the operating coils of controlled contactors (Occasional operating cycles of contact 95-96)	**a.c. supply**	V	110	120	220	240	380	480	500	600	
		A	3.27	3	1.63	1.5	0.95	0.75	0.72	0.12	
Protection against short-circuits	**By gG, maximum rating or by GB2**	A	5								
Connection by screw clamp terminals			Minimum/maximum c.s.a.								
	Flexible cable without cable end 1 conductor	mm²	2 x 1...2.5								
	Flexible cable with cable end 1 conductor		2 x 1...2.5								
	Solid cable without cable end 1 conductor		2 x 1...2.5								
	Tightening torque	N.m	1.7								
Environment											
Conforming to standard			IEC 60947-4-1, IEC 60947-5-1								
Product certifications			EAC								
Degree of protection	Conforming to IEC 60529		IP2X			IP00					
Protective treatment	Conforming to IEC 60068		"TH"								
Ambiant air temperature	Storage	°C	-60...+80								
	Normal operation without derating (IEC 60947-4-1)		-20...+60								
	Minimum/maximum operating temperature (with derating) *(1)*		-20...+70								
Operating positions without derating	In relation to normal vertical mounting plane		Any position								
Flame resistance	Conforming to IEC 60068-2-1	°C	850								
Shock resistance	Permissive acceleration conforming to IEC 60068-2-7		6 gn - 11 ms								
Vibration resistance	Permissive acceleration conforming to IEC 60068-2-6		3 gn								
Dielectric strenght at 50 Hz	Conforming to IEC 60255-5	kV	6								
Surge withstand	Conforming to IEC 60801-5		6								
Operating Characteristics											
Temperature compensation		°C	-20...+60								
Tripping threshold	Conforming to IEC 60947-4-1	A	1.14 ± 0.06 Ir								
Sensitivity to phase failure	Conforming to IEC 60947-4-1		Tripping current 130 % of Ir on two phase, the last one at 0								

(1) Contact your regional sales.

Easy TeSys Protect Thermal overload relays





Easy TeSys thermal overload relays - 3-pole thermal overload relays

Differential Thermal Overload Relays for Use with Fuses or Magnetic Circuit-breakers GV2 L and GV3 L

- Compensated relays with manual or automatic reset,
- with relay trip indicator,
- for a.c.

Relay setting range (A)	Fuses to be used with selected relay		For use with contactor LC1	Reference	Weight kg
	aM (A)	gG (A)			
Class 10 A *(1)* for connection by screw clamp terminals					
0.10…0.16	0.25	2	E06…E38	**LRE01**	0.130
0.16…0.25	0.5	2	E06…E38	**LRE02**	0.130
0.25…0.40	1	2	E06…E38	**LRE03**	0.130
0.40…0.63	1	2	E06…E38	**LRE04**	0.130
0.63…1	2	4	E06…E38	**LRE05**	0.130
1…1.6	2	4	E06…E38	**LRE06**	0.130
1.6…2.5	4	6	E06…E38	**LRE07**	0.130
2.5…4	6	10	E06…E38	**LRE08**	0.130
4…6	8	16	E06…E38	**LRE10**	0.130
5.5…8	12	20	E09…E38	**LRE12**	0.130
7…10	12	20	E09…E38	**LRE14**	0.130
9…13	16	25	E12…E38	**LRE16**	0.130
12…18	20	35	E18…E38	**LRE21**	0.130
16…24	25	50	E25…E38	**LRE22**	0.130
23…32	40	63	E25…E38	**LRE32**	0.130
30…38	40	80	E38	**LRE35**	0.130
17...25	25	50	E40…E95	**LRE322**	0.470
23...32	40	63	E40…E95	**LRE353**	0.470
30...40	40	100	E40…E95	**LRE355**	0.470
37...50	63	100	E50…E95	**LRE357**	0.460
48...65	63	100	E65…E95	**LRE359**	0.460
55...70	80	125	E80…E95	**LRE361**	0.480
63...80	80	125	E80…E95	**LRE363**	0.480
80...104	80	160	E95	**LRE365**	0.520
Class 10 A *(1)* directly connected by connector					
51...81	100	125	E120...E160	**LRE480**	2.2
62...99	125	160	E120...E160	**LRE481**	2.2
84...135	160	200	E120...E160	**LRE482**	2.2
124...198	200	250	E200	**LRE483**	2.1
146...234	250	315	E250...E400	**LRE484**	2.2
174...279	315	315	E250...E400	**LRE485**	2.2
208...333	400	400	E250...E400	**LRE486**	2.2
259…414	400	500	E300...E400	**LRE487**	2.4
321…513	500	800	E500	**LRE488**	3.2
394…630	630	1000	E630	**LRE489**	3.9

(1) Standard IEC 60947-4-1 specifies a tripping time for 7.2 times the setting current I_R : class 10 A: between 2 and 10 seconds.

Easy TeSys Power - Motor circuit-breaker



Environment

Circuit-breaker type			**GZ1**	
Conforming to standards			IEC 60947-2, IEC 60947-4	
Protective treatment	Conforming to IEC 60068-2-30		IEC60068-2-30 Test Db, Variant 2	
Degree of protection			In **GV2 MC01** enclosure: IP 41 In **GV2 MC02** enclosure: IP 55	
Ambient air temperature	Storage	**°C**	- 40…+ 80	
	Operation	**°C**	- 20…+ 60	
Flame resistance	Conforming to IEC 60695-2-1	**°C**	960	
Maximum operating altitude		**m**	2000	
Cabling Number of conductors and c.s.a.			**Min.**	**Max.**
	Solid cable	**mm²**	2 x 1	2 x 6
	Flexible cable without cable end	**mm²**	2 x 1.5	2 x 6
	Flexible cable with cable end	**mm²**	2 x 1	2 x 4
Suitable for isolation	Conforming to IEC 60947-1 § 7-1-6		Yes	
Tightening torque		**N.m**	1.7	
Rated operational voltage (Ue)	Conforming to IEC 60947-2	**V**	690	
Rated insulation voltage (Ui)	Conforming to IEC 60947-2	**V**	690	
Rated operational frequency	Conforming to IEC 60947-2	**Hz**	50/60	
Rated impulse withstand voltage (U imp)	Conforming to IEC 60947-2	**kV**	6	
Total power dissipated per pole		**W**	2.5	
Mechanical durability (C.O.: closing, opening)		**C.O.**	100 000	
Electrical durability	For AC-3 duty	**C.O.**	100 000	
Duty class (maximum operating rate)		**C.O./h**	25	

Breaking Capacity

Circuit-breaker type				**GZ1**								
				01 to 06	**07**	**08**	**10**	**14**	**16**	**20**	**21**	**22 to 32**
Rating			**A**	**0.1 to 1.6**	**2,5**	**4**	**6.3**	**10**	**14**	**18**	**23**	**25 to 32**
Breaking capacity conforming to IEC 60947-2	230/240 V	Icu	**kA**	■	■	■	■	■	■	■	30	30
		Ics % *(1)*		■	■	■	■	■	■	■	100	100
	400/415 V	Icu	**kA**	■	■	■	■	■	10	10	10	10
		Ics % *(1)*		■	■	■	■	■	50	50	40	40
	440 V	Icu	**kA**	■	■	■	30	10	6	6	5	5
		Ics % *(1)*		■	■	■	100	100	50	50	50	50
	500 V	Icu	**kA**	■	■	■	30	8	5	5	3	3
		Ics % *(1)*		■	■	■	100	100	75	75	75	75
	690 V	Icu	**kA**	■	2	2	2	2	2	2	2	2
		Ics % *(1)*		■	75	75	75	75	75	75	75	75

■ > 100 kA. *(1)* As % of Icu.

Motor Circuit-breakers - Magnetic only

Pushbutton control

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3/AC-3e					Magnetic protection rating	Magnetic tripping current Id ± 20 %	Use in association with thermal overload relays	Reference	Weight
230V	**400V**	**440V**	**500V**	**690V**					
kW	**kW**	**kW**	**kW**	**kW**	**A**	**A**	**(Class 10A)**		**kg**
–	–	–	–	–	0.40	5.8	LRE03	**GZ1LE03**	0.250
–	–	–	–	0.37	0.63	9.3	LRE04	**GZ1LE04**	0.250
–	–	–	0.37	0.55	1	15.1	LRE05	**GZ1LE05**	0.250
–	0.37	0.55	0.75	1.1	1.6	26.2	LRE06	**GZ1LE06**	0.250
0.37	0.75	1.1	1.1	1.5	2.5	39	LRE07	**GZ1LE07**	0.250
0.75	1.5	1.5	2.2	3	4	74	LRE08	**GZ1LE08**	0.250
1.1	2.2	3	3.7	4	6.3	91	LRE10	**GZ1LE10**	0.250
2.2	4	4	5.5	7.5	10	149	LRE14	**GZ1LE14**	0.250
–	5.5	5.5	9	11	14	253.4	LRE16	**GZ1LE16**	0.250
4	7.5	9	10	15	18	341	LRE21	**GZ1LE20**	0.250
5.5	11	11	15	22	25	388.3	LRE22	**GZ1LE22**	0.250
7.5	15	15	18.5	22	32	538	LRE32	**GZ1LE32**	0.250

Motor Circuit-breakers - Thermal-magnetic

Pushbutton control

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3/AC-3e					Setting range of thermal trips	Magnetic tripping current Id ± 20 %	Reference	Weight
230V	**400V**	**440V**	**500V**	**690V**				
kW	**kW**	**kW**	**kW**	**kW**	**A**	**A**		**kg**
–	–	–	–	–	0.1…0.16	1.9	**GZ1E01**	0.260
–	–	–	–	–	0.16…0.25	3.1	**GZ1E02**	0.260
–	–	–	–	–	0.25…0.40	5.8	**GZ1E03**	0.260
–	–	–	–	0.37	0.40…0.63	9.3	**GZ1E04**	0.260
–	–	–	0.37	0.55	0.63…1	15.1	**GZ1E05**	0.260
–	0.37	0.55	0.75	1.1	1…1.6	26.2	**GZ1E06**	0.260
0.37	0.75	1.1	1.1	1.5	1.6…2.5	39	**GZ1E07**	0.260
0.75	1.5	1.5	2.2	3	2.5…4	74	**GZ1E08**	0.260
1.1	2.2	3	3.7	4	4…6.3	91	**GZ1E10**	0.260
2.2	4	4	5.5	7.5	6…10	149	**GZ1E14**	0.260
–	5.5	5.5	9	11	9…14	253.4	**GZ1E16**	0.260
4	7.5	9	10	15	13…18	341	**GZ1E20**	0.260
5.5	9	11	11	18.5	17…23	341	**GZ1E21**	0.260
5.5	11	11	15	22	20…25	388.3	**GZ1E22**	0.260
7.5	15	15	18.5	22	24…32	538	**GZ1E32**	0.260

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