



## OPTIM EMS-C-68,75-440

OPTIM EMS-C-68,75-440, Capacitor bank

Code: R4A318.

- > Cable section (mm<sup>2</sup>): 1 x 50
- > Nr steps: 4
- > kvar (400 V): 57
- > kvar (440 V): 68,75
- > Man.Switch (A): Included
- > Composition: (6,25 + 12,5 + 2 x 25)
- > Use voltage (V): 440

### Description

**Optim EMS-C** capacitor banks are designed for power factor correction in networks with highly fluctuating load variations. Their switching system is based on the use of solid state semiconductors and it allows the different steps to be connected and disconnected in only milliseconds.

With this system, transients are prevented between the connection and disconnection of the steps, obtaining an immediate response to the load fluctuations. In addition, the need for maintenance of the capacitor bank is reduced thanks to the absence of moving elements.

### Application

The most common application is with individual loads or in installations where a quick compensation response is needed (for ex., welding units, motors for lifting units, lifts, etc.)



## OPTIM EMS-C-68,75-440

Automatic static switching capacitor banks

Code: R4A318.

### Specifications

#### AC power supply

Frequency	fn marcada en la etiqueta
Nominal voltage	Un marcada en la etiqueta

#### Electrical characteristics

Losses (W)	1 W/kvar
Discharge resistance	75 V / 3 min
Tolerance C	± 10%
Voltage	10 % (440 V for 400 V equipment)

#### Mechanical characteristics

Size (mm) width x height x depth	545 x 710 x 220 (mm)
Envelope	Exposi type with oven drying. RAL 7035 Grey / RAL 3005 Garnet
Ventilation	Natural outdoor ambient temperature ≤ 40 °C. For outside ambient temperature > 40 °C, the room where the battery is located must be cooled.
Weight (kg)	42

#### Environmental characteristics

Protection class	IP 21
Relative humidity (without condensation)	80%
Working temperature	T° class D: Daily average: 45 °C, annual average: 35 °C, maximum during 1h: 55 °C

#### Current measurement circuit

Allowable overload	1,3 In
Permanent overload	1,3 In
Transformation ratio	Transformer In/5 A

#### Standards

Electrical safety, Maximum height (m)	1000 máx.
Standards	UNE-EN 61921, UNE-EN 61642, IEC 60831

#### Protection

Element	Internal fuses and overpressure system
Circuit breaker type	Three-pole circuit breaker per step, curve C. Icc = 6 kA / 400 V

#### OPTIM EMS

Automatic capacitor banks with static contactor, wall-mounted , 50 Hz.



## OPTIM EMS-C-68,75-440

Automatic static switching capacitor banks

Code: R4A318.

CODE	TYPE	kvar (400 V)	kvar (440 V)	Nr steps	Cable section (mm <sup>2</sup> )
R4A300.	OPTIM EMS-C-18,75-440	15,5	18,75	2	1 x 6
R4A300FR00000	OPTIM EMS-C-18,75-440	15,5	18,75	2	1 x 6
R4A304.	OPTIM EMS-C-31,25-440	26	31,25	3	1 x 16
R4A304FR00000	OPTIM EMS-C-31,25-440	26	31,25	3	1 x 16
R4A309.	OPTIM EMS-C-43,75-440	36	43,75	3	1 x 25
R4A309FR00000	OPTIM EMS-C-43,75-440	36	43,75	3	1 x 25
R4A318.	OPTIM EMS-C-68,75-440	57	68,75	4	1 x 50
R4A318FR00000	OPTIM EMS-C-68,75-440	57	68,75	4	1 x 50
R4A321.	OPTIM EMS-C-82,50-440	68	82,5	4	1 x 70
R4A321FR00000	OPTIM EMS-C-82,50-440	68	82,5	4	1 x 70
R4A330.	OPTIM EMS-C-105-440	87	105	4	1 x 70
R4A330FR00000	OPTIM EMS-C-105-440	87	105	4	1 x 70
R4A336.	OPTIM EMS-C-120-440	99	120	4	1 x 95
R4A336FR00000	OPTIM EMS-C-120-440	99	120	4	1 x 95

Cable cross-section for installations with  $U_n = 400$  V. The installation company must ensure compliance with the low voltage directive at all times, in accordance with the characteristics of each installation and type of cable.