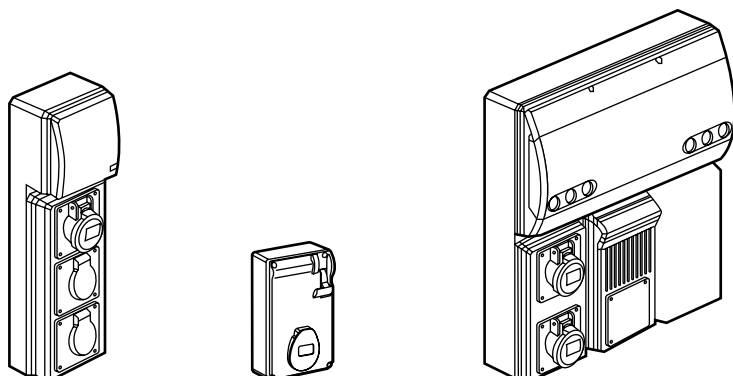


P17 combined units

Cat. Nos: 0 566 XX - 0 572 XX - 0 577 XX - 0 589 XX



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1. DESCRIPTION

- Product for distributing power close to equipment
- Supply of several current types (amps/volts) for industrial and/or domestic pin configuration
- Power supply for one or more devices
- Protection of users and circuits:
 - off-load connection and disconnection provided by units equipped with switched socket with double mechanical interlock
 - protection by MCB, RCBO, RCD (RCCB)
- Material: plastic
- Colour: RAL 7035
- IK08
- IP44, IP55, IP66
- Classe II 

2. USE

- Switch with double mechanical interlock:
 - 1st interlock: switch cannot be turned on unless a plug has been inserted
 - 2nd interlock: plug cannot be removed when the switch is on
- Marking of the switch ON and OFF positions
- Transparent window to view protection devices
- Cable entries to be drilled
- Equipped or to be equipped with panel mounting sockets with standard fixing centres (70 x 70)
- Plug-in system: socket can be wired quickly in the cover independently of the box already fixed to the wall



3. RANGE

3.1 Single socket units

- Single socket units with switch (surface and panel mounting version) 16 and 32 A
- Single socket units with switch and rail (surface and panel mounting version) 16 and 32 A
- Single socket unit 63 A

			Panel mounting socket with switch	Single unit with switch and junction box	Single unit with switch and rail (5 modules)
400V	63A	3P+E	0 572 94	0 972 98	0 589 18
		3P+E+T	0 572 95	0 589 10	0 572 99

- Single ELV combined unit

			Panel mounting socket without rail with transformer 150 VA	Panel mounting socket with protection device and transformer 160 VA	Surface mounting socket without rail with transformer 150 VA
24V	16A	2P	0 589 26	0 589 25	0 589 27

3.2 Multi-socket combined units

Combined units with 2 IP44 sockets

Cat. No. 0 589 20 (can take up to 3 sockets)

External dimensions: W 265 x H 441 mm

13 Lexic modules max.

In A : 16 A according to IEC 61439-2 and 61439-3

1 x 16 A 2P 24 V (faceplate socket with transformer 150 VA)

1 x 16 A 2P+E 230 V IP44 socket

1 x blanking plate for a third socket

1 x 2-pole MCB 6 A (Cat. No. 0 064 64 or 4 077 80)

1 x 2-pole MCB 16 A (Cat. No. 0 064 68 or 4 077 84)

1 x 2-pole MCB 32 A (Cat. No. 0 064 61 or 4 077 77)

Cat. No. 589 21 (can take up to 3 sockets)

External dimensions: W 265 x H 441 mm

13 Lexic modules max.

In A : 40 A according to IEC 61439-2

: 30 A according to IEC 61439-3

1 x 16 A 2P+E 230 V IP44 socket

1 x 32 A 3P+N+E 400 V IP44 socket

1 x blanking plate for a third socket

1 x 2-pole MCB 16 A (Cat. No. 0 064 68 or 4 077 84)

1 x 4-pole MCB 32 A (Cat. No. 0 065 66 or 4 079 01)

3. RANGE (continued)

Cat. No. 0 589 30

External dimensions: W 125 x H 371 mm
5 Lexic modules max.
In A : 20 A according to IEC 61439-2 and 61439-3
2 x 16 A 2P+E 230 V IP44 sockets
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)

Cat. No. 0 589 31

External dimensions: W 125 x H 371 mm
5 Lexic modules max.
In A : 20 A according to IEC 61439-2 and 61439-3
2 x 16 A 2P+E 250 V domestic pin configuration sockets
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)

Cat. No. 0 589 32

External dimensions: W 125 x H 371 mm
5 Lexic modules max.
In A : 20 A according to IEC 61439-2 and 61439-3
1 x 16 A 2P+E 230 V IP44 socket
1 x 16 A 3P+E 400 V IP44 socket
1 x 4-pole MCB 20 A (Cat. No. 4 078 99)

Cat. No. 0 589 37

External dimensions: W 125 x H 371 mm
5 Lexic modules max.
In A : 20 A according to IEC 61439-2 and 61439-3
1 x 16 A 2P+E 230 V IP44 socket
1 x 16 A 2P+E 250 V domestic pin configuration socket
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)

Combined units with 3 sockets

Cat. No. 0 589 33

External dimensions: W 125 x H 421 mm
5 Lexic modules max.
In A : 20 A according to IEC 61439-2 and 61439-3
2 x 16 A 2P+E 250 V domestic pin configuration sockets
1 x 16 A 2P+E 230 V IP44 socket
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)

Cat. No. 0 589 34 (can take up to 4 sockets)

External dimensions: W 265 x H 441 mm
12 Lexic modules max.
In A : 20 A according to IEC 61439-2 and 61439-3
2 x 16 A 2P+E 250 V domestic pin configuration sockets
1 x 16 A 2P+E 230 V IP44 socket
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)
1 x blanking plate for a fourth socket

Combined unit with 4 sockets

Cat. No. 0 589 35 (can take up to 5 sockets)

External dimensions: W 265 x H 501 mm
12 Lexic modules max.
In A : 40 A according to IEC 61439-2 and 61439-3
2 x 16 A 2P+E 250 V domestic pin configuration sockets
1 x 16 A 2P+E 230 V IP44 socket
1 x 32 A 3P+E 400 V IP44 socket
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)
1 x 3-pole MCB 32 A (Cat. No. 4 078 32)
1 x 4-pole RCCB 63 A (Cat. No. 4 116 62)
1 x blanking plate for a fifth socket

Cat. No. 0 589 36 (can take up to 5 sockets)

External dimensions: W 265 x H 501 mm
12 Lexic modules max.
In A : 40 A according to IEC 61439-2 and 29 A according to 61439-3
2 x 16 A 2P+E 250 V domestic pin configuration sockets
1 x 16 A 2P+E 230 V IP44 socket
1 x 32 A 3P+N+E 400 V IP44 socket
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)
1 x 4-pole MCB 32 A (Cat. No. 4 079 01)
1 x 4-pole RCCB 63 A (Cat. No. 4 116 62)
1 x blanking plate for a fifth socket

3. RANGE (continued)

Combined units with 5 sockets

Cat. No. 0 589 22

External dimensions: W 405 x H 441 mm
18 Lexic modules max.
In A : 32 A according to IEC 61439-2 and 61439-3
2 x 16 A 2P 24 V ELV socket with transformer 150 VA
1 x 16 A 2P+E 250 V domestic pin configuration socket
1 x 16 A 2P+E 230 V IP44 socket
1 x 16 A 3P+E 400 V IP44 socket
1 x 4-pole RCCB 40 A (Cat. No. 0 086 94 or 4 116 61)
1 x 2-pole MCB 6 A (Cat. No. 4 077 80)
1 x 3-pole MCB 16 A (Cat. No. 4 078 29)
1 x 2-pole MCB 2 A (Cat. No. 4 077 77)
1 x 2-pole MCB 20 A (Cat. No. 4 077 85)

3.3 Multi-socket combined units with faceplates

To be equipped with 16 A sockets with standard fixing centres (70 x 70) only or domestic pin configuration sockets 0 576 71 and 0 576 72.

Cat. No.	No. of modules	Characteristics	Ext. dim. (HxW)
0 577 07	5	for 3 x 16 A sockets	421 x 125
0 577 08	12	for 4 x 16 A sockets	441 x 265
0 577 09	18	for 6 x 16 A sockets	441 x 405

3.4 Self assembly combined units: bases for junctions

Cat. No.	Characteristics	Ext. dim. (HxW)
0 577 00	for 1 interlocked socket or 1 faceplate 280 x 125	421 x 125
0 577 01	for 2 interlocked sockets or 2 faceplates 280 x 125	501 x 265
0 577 02	for 3 interlocked sockets or 3 faceplates 280 x 125	501 x 405

Note: Some Cat. Nos. in this range will only be sold until stocks run out.

3.5 Combined unit for use in refrigerated containers

Cat. No. 0 657 106

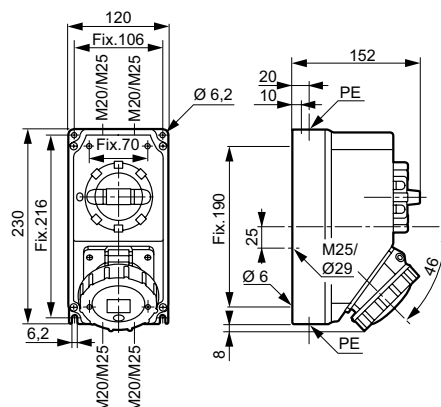
Combined unit 3P+E 32 A 440 V - earth at 3 o'clock - with switch and IP 66/67 socket outlet
Perishable goods are transported in refrigerated containers by road, sea and rail all over the world. The power is supplied by a combined unit designed for use in refrigerated containers by long haulage companies (container terminals, transit areas, railway stations, ports, airports, warehouses, ships, etc.).

Associated mobile products:

Plug:6 571 26
Mobile socket:6 571 46

Associated fixed product:

Panel mounting socket:6 571 16



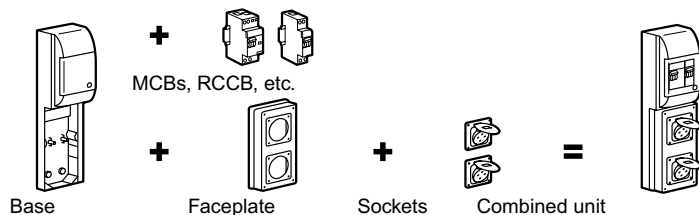
P17 combined units

Cat. Nos: 0 566 XX - 0 572 XX - 0 577 XX - 0 589 XX

3. RANGE (continued)

3.5 Self assembly combined units: bases and boxes

Example configuration of a combined unit



COMBINED UNITS HEIGHT 220 MM TO 441 MM

BASES FOR 220 X 125 MM FACEPLATES

220 X 125 MM FACEPLATES

Surface mounting box				Base for up to 2 x16 A sockets				Base for up to 4 x16 A sockets				Base for up to 6 x16 A sockets				+				1 x 16 or 32 A socket		2 x 16 A sockets		1 x 63 A socket		Plain plate	
																											
220 x 125 mm ⁽⁵⁾				371 x 125 mm ⁽⁵⁾ 5-module DIN rail				441 x 265 mm ⁽⁵⁾ 13-module DIN rail				441 x 405 mm ⁽⁵⁾ 20-module DIN rail															
Pack	Cat. No			Pack	Cat. No			Pack	Cat. No			Pack	Cat. No			Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No
1	0 577 10 ⁽⁷⁾			1	0 589 38 ⁽⁷⁾			1	0 577 05 ⁽⁸⁾			1	0 577 06 ⁽⁸⁾			5	0 577 12	5	0 577 13 ⁽²⁾	2	0 577 17	5	0 577 15				

COMBINED UNITS HEIGHT 280 MM TO 501 MM

BASES FOR 280 X 125 MM FACEPLATES

280 X 125 MM FACEPLATES

Surface mounting box		Base for up to 3 x 16 A sockets		Base for up to 6 x 16 A sockets		Base for up to 3 x 16 A sockets		2 x 16 A or 32 A sockets		1 x 16 or 32 A socket and 1 x 63 A socket		3 x 16 A sockets ⁽³⁾		Plain plate	
															
280 x 125 mm ⁽⁵⁾		421 x 125 mm ⁽⁵⁾ 5-module DIN rail		501 x 265 mm ⁽⁵⁾ 13-module DIN rail		501 x 405 mm ⁽⁵⁾ 20-module DIN rail									
Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No	Pack	Cat. No
3	0 577 11 ⁽⁷⁾	1	0 577 20 ⁽⁷⁾	1	0 577 03 ⁽⁸⁾	1	0 577 04 ⁽⁸⁾	4	0 577 18 ⁽²⁾	2	0 577 19 ⁽²⁾	4	0 577 14 ⁽²⁾	4	0 577 16

(1) Can take a key-operated lock Cat. No. 0 577 35 - (2) Supplied with blanking plate

(3) To be mounted horizontally except 16 A domestic pin sockets which must be mounted vertically (IP44 with plug inserted)

(4) IP 54 cover closed - IP 44 connected (5) External dimensions: H x W - (6) For faceplate Cat. No. 0 577 17/19

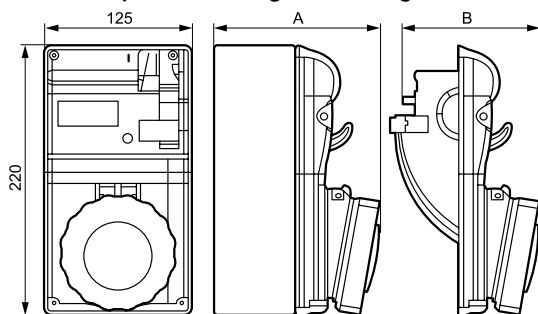
(7) Can be pole-mounted using kit Cat. No. 0 364 46/47/48/49 (see data sheet in e-catalogue for compatibility) - (8) See 1 + 7 - (9) Wiring required for pilot wire

P17 combined units

Cat. Nos: 0 566 XX - 0 572 XX - 0 577 XX - 0 589 XX

4. DIMENSIONS

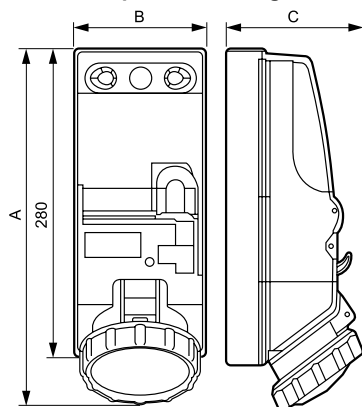
Surface or panel mounting 16/32 A single unit with switch



		IP 44 Cat. No.	Dimensions (mm)		IP 55 Cat. No.	Dimensions (mm)	
			A	B		A	B
LV 16 A	2P+E	0 566 01	127	122	0 566 21	133	128
	3P+E	0 566 05	129	124	0 566 25	134	129
	3P+N+E	0 566 06	130	125	0 566 26	135	130
LV 32 A	2P+E	0 566 09	138	133	0 566 29	143	138
	3P+E	0 566 13	138	133	0 566 33	143	138
	3P+N+E	0 566 14	139	134	0 566 34	144	139

Refer to these dimensions for similar Cat. Nos.

Surface or panel mounting 16/32 A single unit with rail and switch

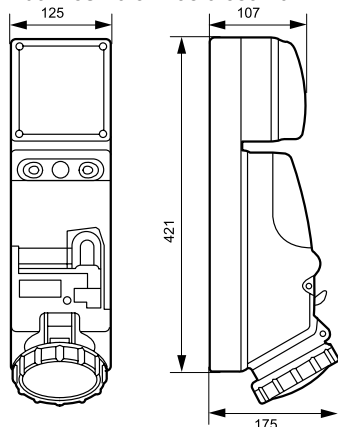


		IP 44 Cat. No.	Dimensions (mm)			IP 55 Cat. No.	Dimensions (mm)		
			A	B	C		A	B	C
LV 16 A	2P+T	0 566 40/41	290	125	155	0 566 60/61	300	125	155
	3P+T	0 566 45	290	125	155	0 566 65	300	125	155
	3P+N+T	0 566 46	290	125	155	0 566 66	300	125	155
LV 32 A	2P+T	0 566 49	295	125	155	0 566 69	310	125	155
	3P+T	0 566 53	295	125	155	0 566 73	310	125	155
	3P+N+T	0 566 54	295	125	155	0 566 74	310	125	155

Refer to these dimensions for similar Cat. Nos.

Surface mounting 63 A single unit with switch (without rail)

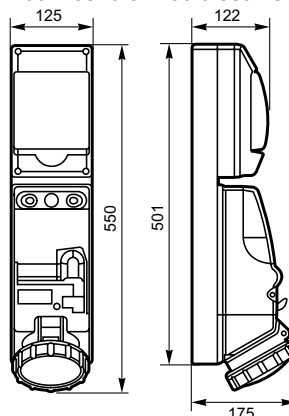
Cat. Nos. 0 572 98/0 589 10



4. DIMENSIONS (continued)

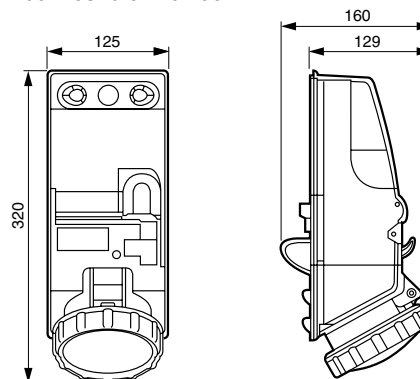
Surface mounting 63 A single unit with switch and rail

Cat. Nos. 0 572 99/0 589 18



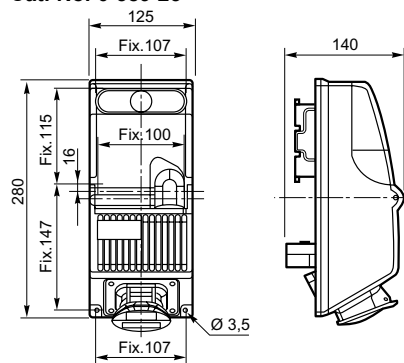
Panel mounting 63 A single unit with switch

Cat. Nos. 0 572 94/95

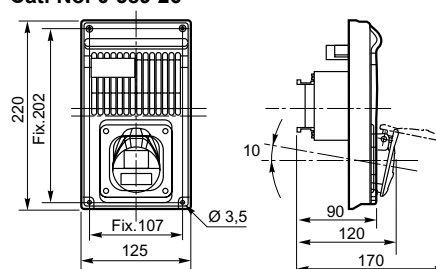


ELV sockets and combined units

Cat. No. 0 589 25



Cat. No. 0 589 26

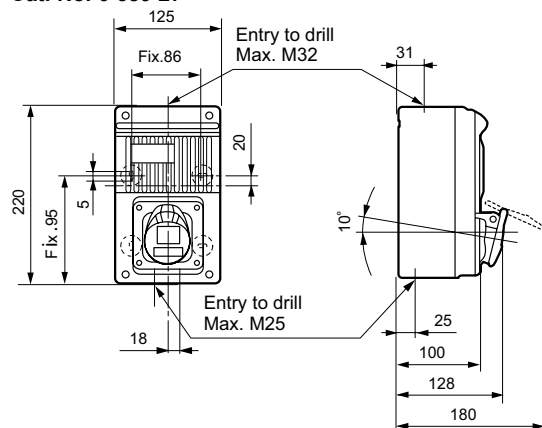


P17 combined units

Cat. Nos: 0 566 XX - 0 572 XX - 0 577 XX - 0 589 XX

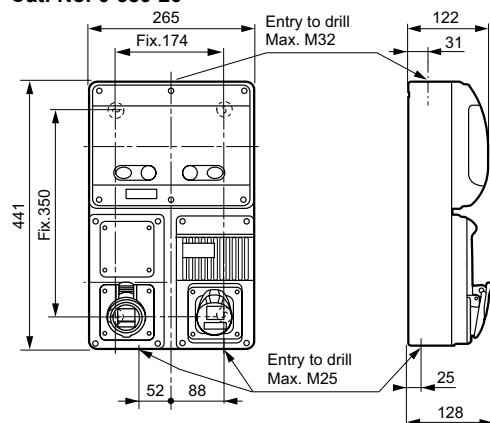
4. DIMENSIONS (continued)

Cat. No. 0 589 27



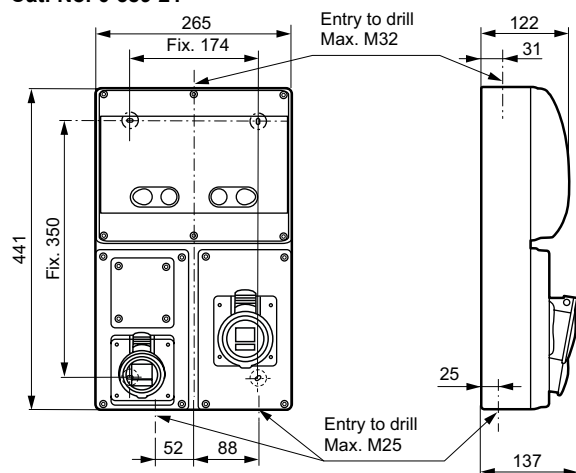
2 sockets with MCB and transformer

Cat. No. 0 589 20



2 sockets with MCB

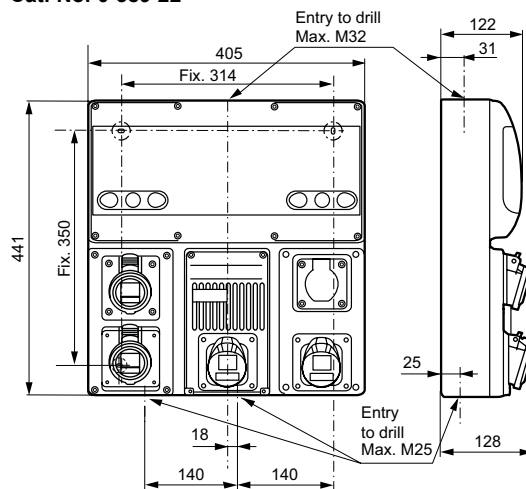
Cat. No. 0 589 21



4. DIMENSIONS (continued)

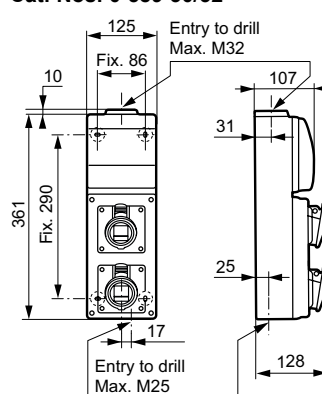
5 sockets with MCB + RCCB + transformer

Cat. No. 0 589 22

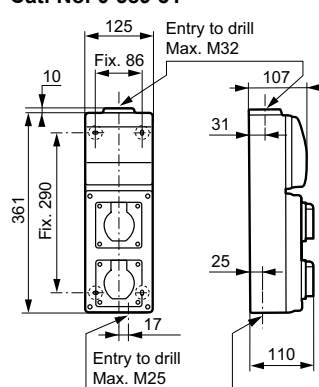


2 sockets with MCB

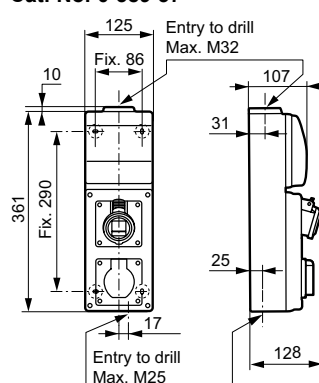
Cat. Nos. 0 589 30/32



Cat. No. 0 589 31



Cat. No. 0 589 37



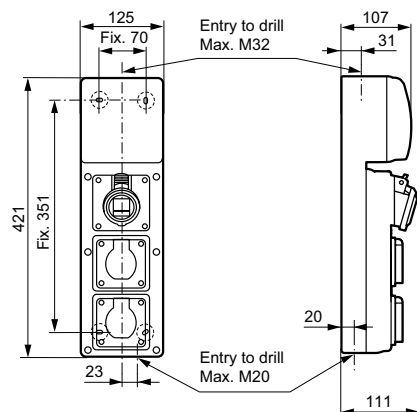
P17 combined units

Cat. Nos: 0 566 XX - 0 572 XX - 0 577 XX - 0 589 XX

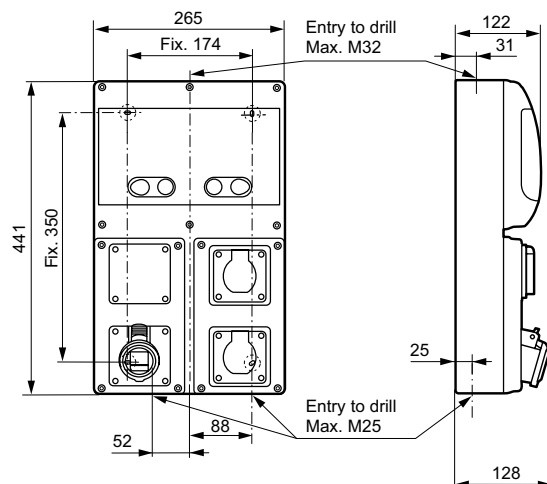
4. DIMENSIONS (continued)

3 sockets with MCB

Cat. No. 0 589 33

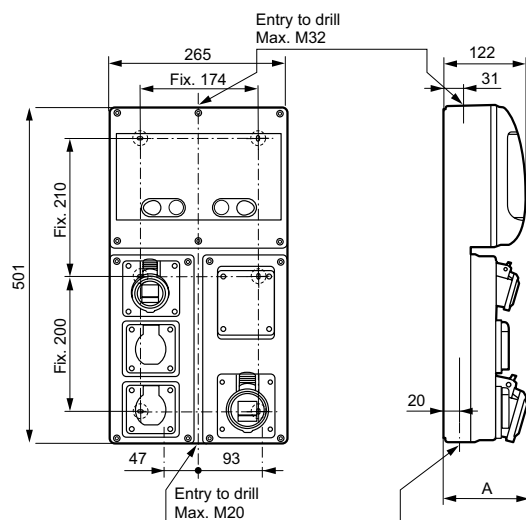


Cat. No. 0 589 34



4 sockets with MCB and RCCB

Cat. Nos. 0 589 35/36

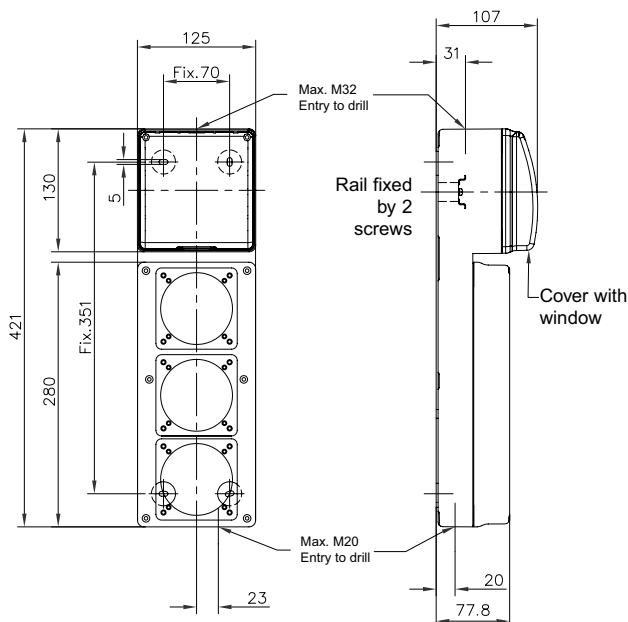


	A
0 589 35	119
0 589 36	120

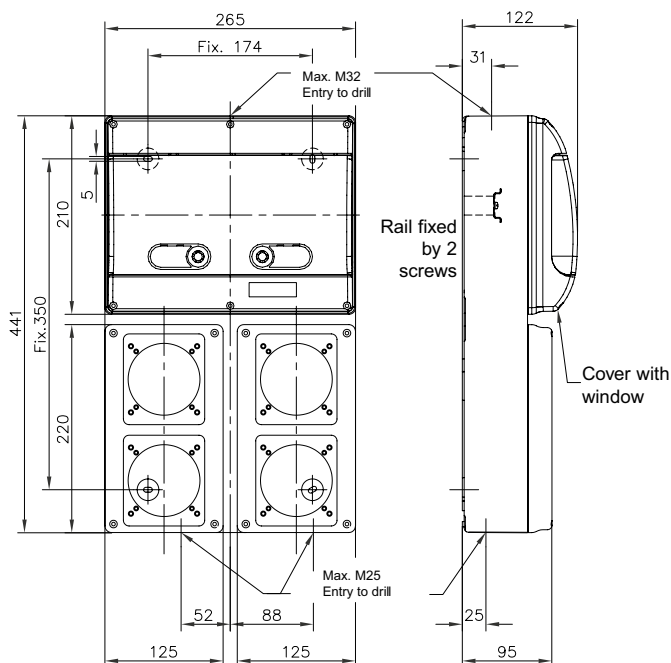
4. DIMENSIONS (continued)

Multi-socket combined units equipped with faceplates

Cat. No. 0 577 07

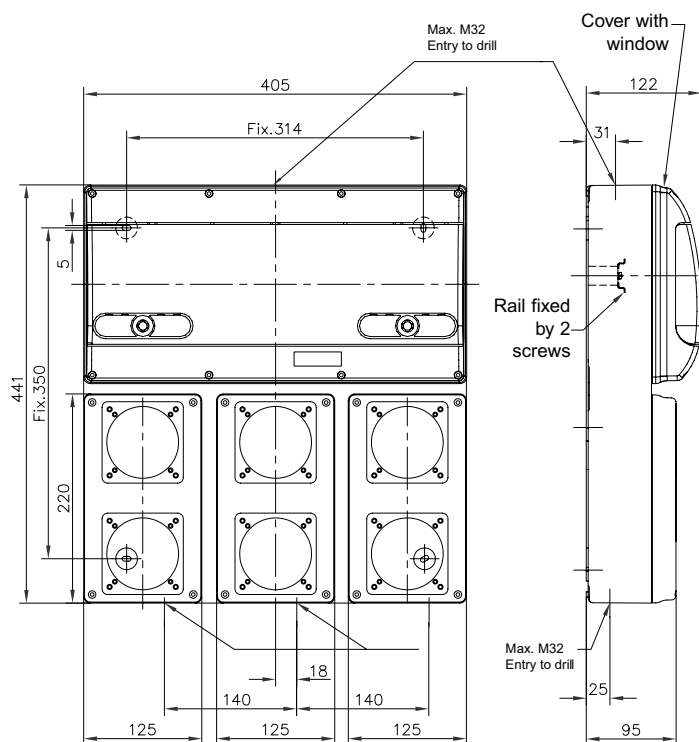


Cat. No. 0 577 08



4. DIMENSIONS (continued)

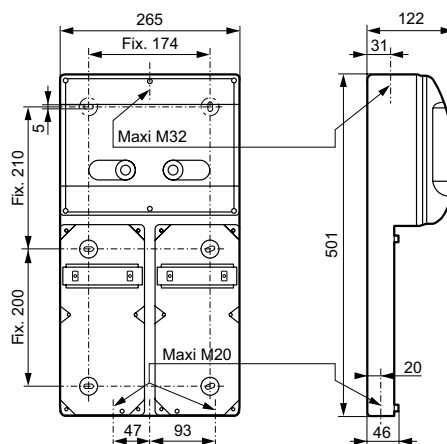
Cat. No. 0 577 09



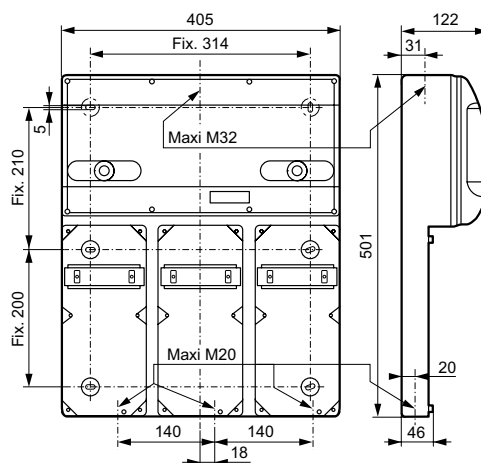
4. DIMENSIONS (continued)

Bases

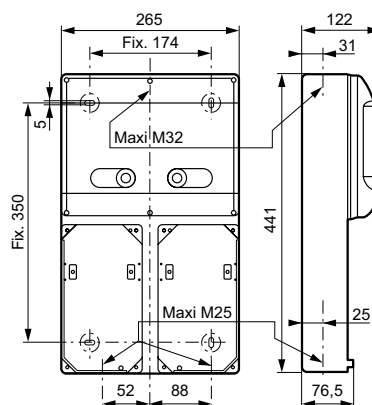
Cat. Nos. 0 577 01/03



Cat. Nos. 0 577 02/04

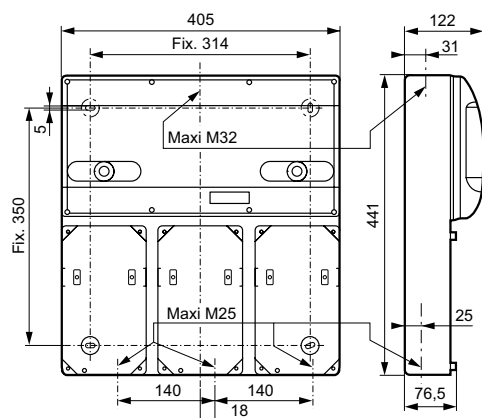


Cat. No. 0 577 05

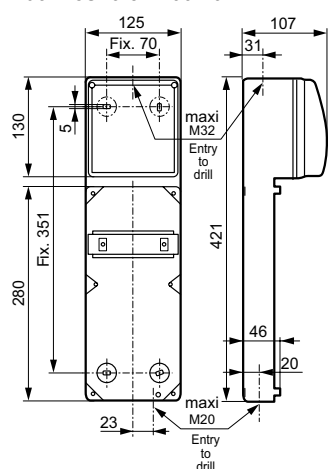


4. DIMENSIONS (continued)

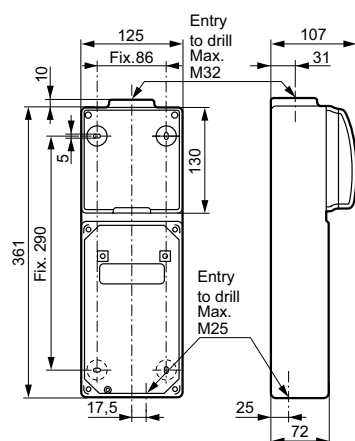
Cat. No. 0 577 06



Cat. Nos. 0 577 00/20



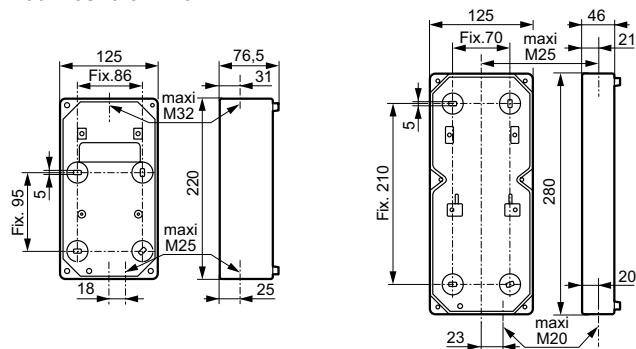
Cat. No. 0 589 38



4. DIMENSIONS (continued)

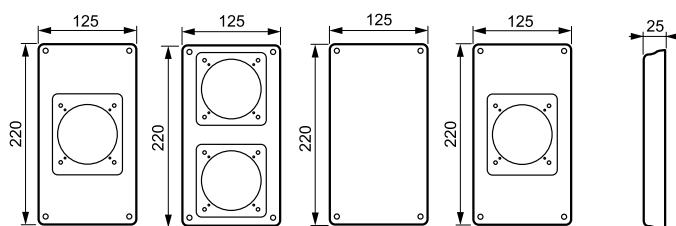
Boxes

Cat. Nos. 0 577 10/11

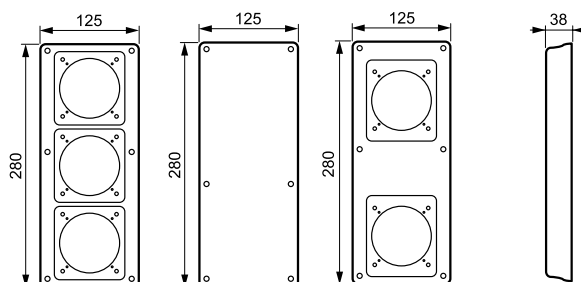


Faceplates

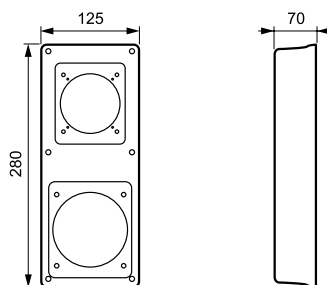
Cat. Nos. 0 577 12/13/15/17



Cat. Nos. 0 577 14/16/18



Cat. No. 0 577 19



5. CONNECTION AND PROTECTION

5.1 Connection of units

Cable cross-section inside the unit, according to the current rating:
(see §8.2)

5.2 Protection

The combined units are equipped with Lexic modular MCB and/or Lexic RCCB (see page 1/2).

NB: According to the required use, it is essential to check that protection against indirect contact (residual current) and protection against overloads and short circuits (Lexic circuit breakers) are both provided.

Caution: A residual current device does not provide protection against overloads and short circuits.

Short-circuit withstand: For the short-circuit withstand of modular circuit breakers, RCBOs and RCCBs, refer to the performance pages for these products in the current Legrand catalogue.

Reminder of the ratings for units equipped with RCCB

Rating	Sensitivity
-16 A.....25 A RCCB	30mA
-32 A.....40 A RCCB	
-40 A.....63 A RCCB	

6. TECHNICAL CHARACTERISTICS

6.1 Glow wire test

- live parts: 850 °C
- housing: 650 °C

6.2 Dielectric strength

- equipped with IEC sockets: 2,500 V
- equipped with domestic sockets: 2,000 V

6.3 UV resistance

IDose rate: 550 W/m²
Test duration: 168 hours
Infrared and ultraviolet filter in order to get as close to the solar spectrum as possible

6.4 Breaking capacities

	16A	32A	63A
AC 23	8.4 kW	16.8 kW	33 kW
AC 22			
AC 23B			

6. TECHNICAL CHARACTERISTICS (continued)

6.5 Operating temperatures

-25°C/+40°C

Reminder of circuit breaker derating according to ambient temperature. A standardised circuit breaker is adjusted to operate at In at an ambient temperature of 30 °C.

The nominal characteristics of this device are modified according to the ambient temperature inside the cabinet or the enclosure where the circuit breaker is located.

In	Ambient temperature/IM					
	-10 °C	0	10 °C	20 °C	30 °C	40 °C
0.5 A	0.6	0.57	0.55	0.52	0.5	0.47
0.8 A	0.96	0.92	0.88	0.84	0.8	0.76
1 A	1.17	1.1	1.07	1.03	1	0.97
2 A	2.34	2.21	2.14	2.06	2	1.94
3 A	3.5	3.36	3.24	3.12	3	2.88
4 A	4.7	4.44	4.28	4.12	4	3.88
6 A	7	6.6	6.4	6.18	6	5.8
8 A	9.6	9.2	8.8	8.4	8	7.6
10 A	11.5	11.1	10.7	10.3	10	9.7
13 A	15	14.3	13.9	13.4	13	12.6
16 A	18.7	18	17.3	16.6	16	15.4
20 A	23.2	22.4	21.6	20.8	20	19.2
25 A	29.5	28.3	27.2	26	25	24
32 A	37.8	36.5	34.9	33.3	32	30.7
40 A	48	46	44	42	40	38
50 A	60	57.5	55	52.5	50	47.5
63 A	75.6	72.5	69.9	66.1	63	59.8

6.6 Resistance to chemical agents

Aqueous solutions	Housing	Window
Cold water	++	++
Warm water	+	++
Steam	--	++
5% saline solution	++	++
Oxygenated water	-	++
Water + detergent	+	-
Water + surfactants	+	+
Formic aldehyde	-	++
Alcohols		
Ethanol	+	+
Methanol	+	-
Propanol	++	-
Butanol	++	-
Glycols		
Ethylene glycol	-	+
Phenols	-	-
Cresols		
Bases		
Ammonia	+	-
Sodium hydroxide (caustic soda)	++	-
Sodium hypochlorite (bleach 12°)	++	+
Potassium hydroxide (potash)	++	-
Oxydizing strong acids		
Concentrated acetic acid	+	++

6. TECHNICAL CHARACTERISTICS (continued)

	Housing	Window
Nitric acid 5%	-	++
Sulfuric acid 10%	+	++
Hydrochloric acid 30%	+	+
Perchloric acid 70%	+	+
Hydrofluoric acid 70%	-	++
Chromic acid 50%	+	+
Phosphoric acid 30%	+	+
Weak acids		
Diluted acetic acid < 25%	++	++
Citric acid	++	++
Lactic acid	++	++
Formic acid	-	-
Uric acid	++	+
Animal oils and fats		
Lard	+	-
Butter, cream	++	++
Vegetable oils and fats		
Linseed oil	++	-
Groundnut/olive oil	++	+
Castor oil	++	++
Glycerin	-	-
Mineral oils and fats		
Paraffin (vaseline)	++	++
Engine oil	+	-
Silicone oil	++	++
Cutting oil	+	-
Hydraulic fluid	+	--
Hydrocarbons		
Unleaded petrol	+	-
Diesel oil	+	+
Kerosene	+	+
White spirit	+	-
Chlorinated solvents		
Trichloroethylene	-	--
Trichloroethane	-	-
Perchloroethylene	-	--
Methyl chloride	--	--
Carbon tetrachloride	-	--
Chloroform	--	--
Aromatic solvents		
Benzen	-	-
Toluene	-	-
Xylene	-	-
Aliphatic solvents		
Hexane	-	+
Heptane	-	-
Fluoride solvents		
Trichlorofluoromethane	-	--
Ketones		
Acetone	--	--
Methyl ethyl ketone	--	--
Ethyl acetate	--	--
Terpenes		
Turpentine	-	-

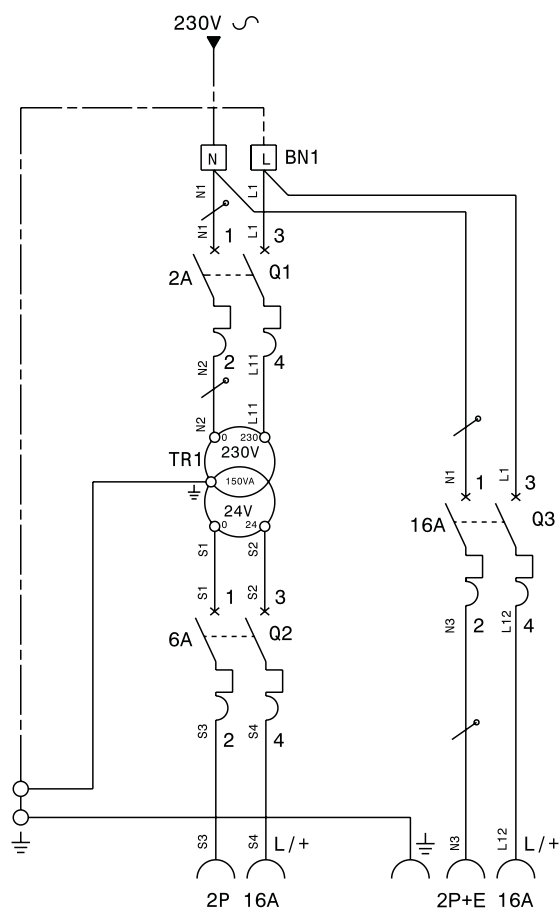
6. TECHNICAL CHARACTERISTICS (continued)

Resistance to chemical agents at ambient temperature according to risk of exposure by spraying

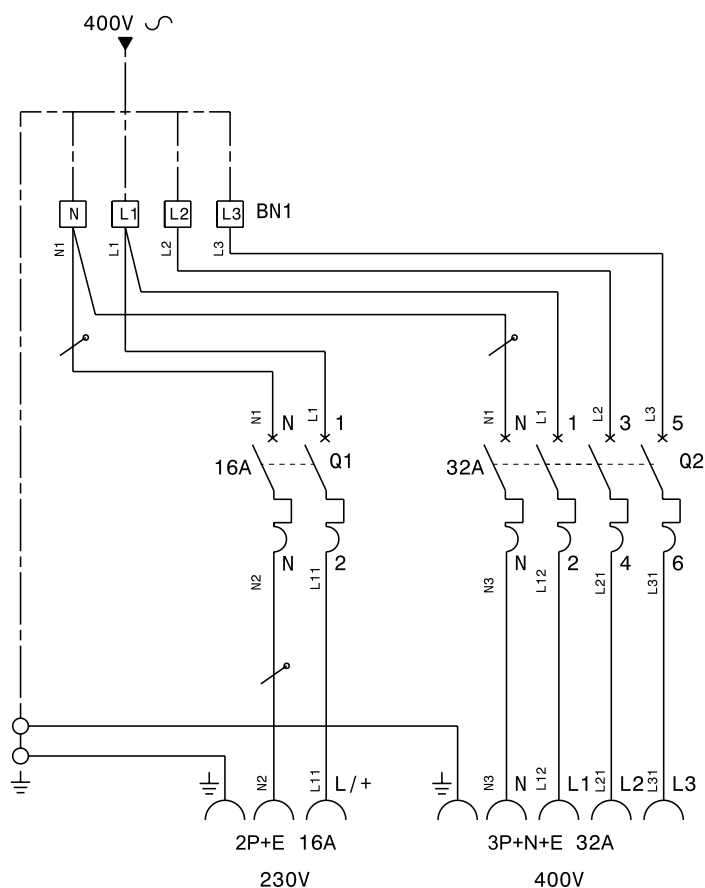
- (++) excellent resistance (continuous exposure)
- (+) good resistance (long-term exposure)
- (-) limited resistance (brief exposure possible)
- (--) poor resistance (exposure to be avoided)

7. WIRING DIAGRAMS

Cat. No. 0 589 20

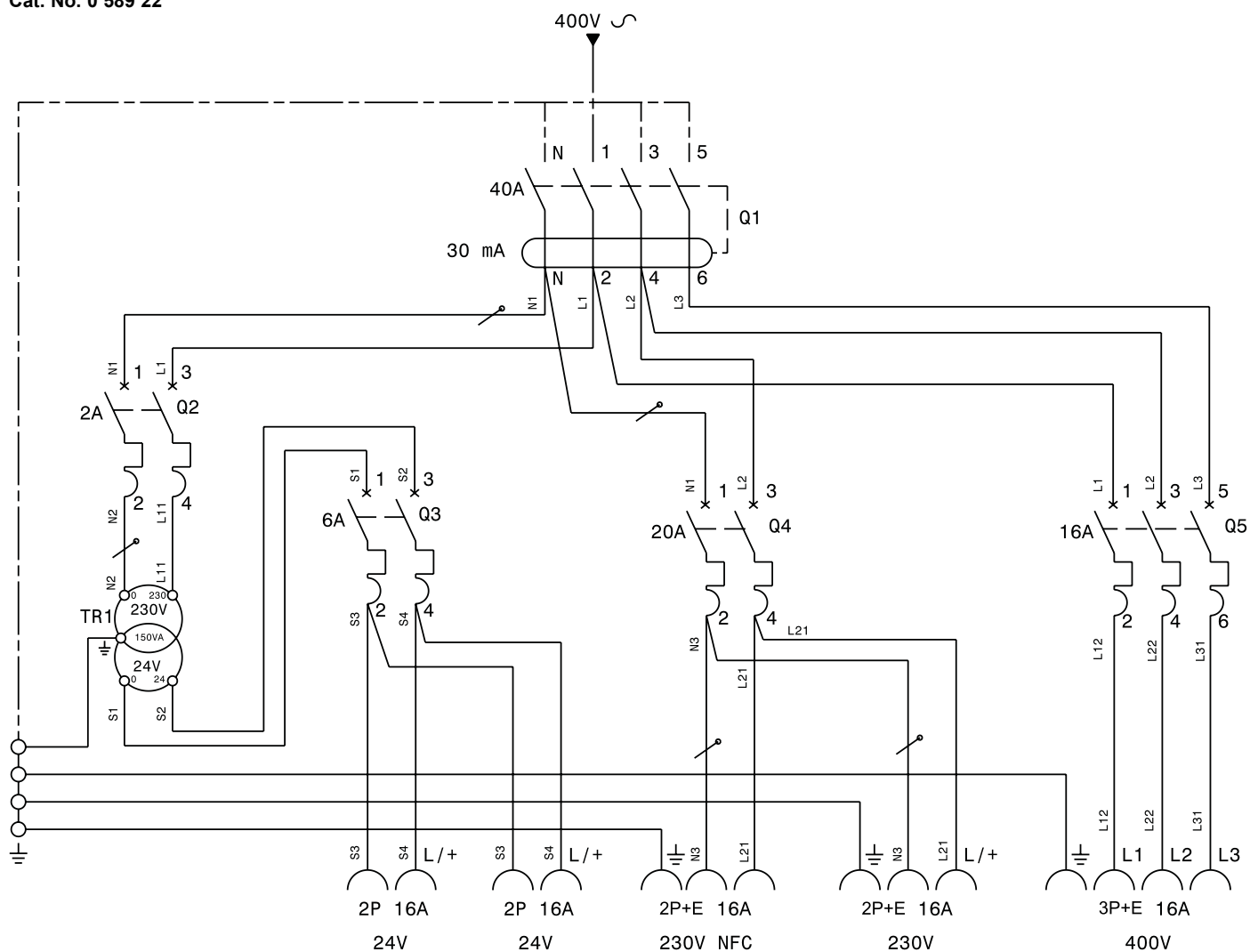


Cat. No. 0 589 21

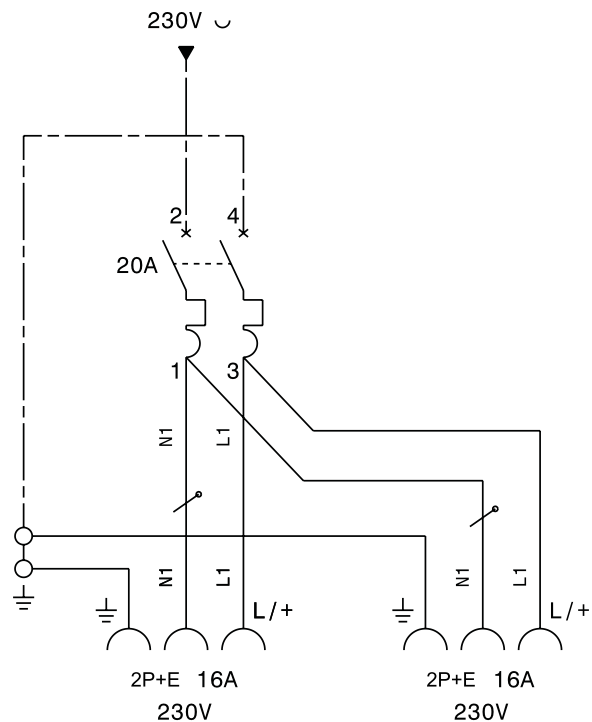


7. WIRING DIAGRAMS (continued)

Cat. No. 0 589 22

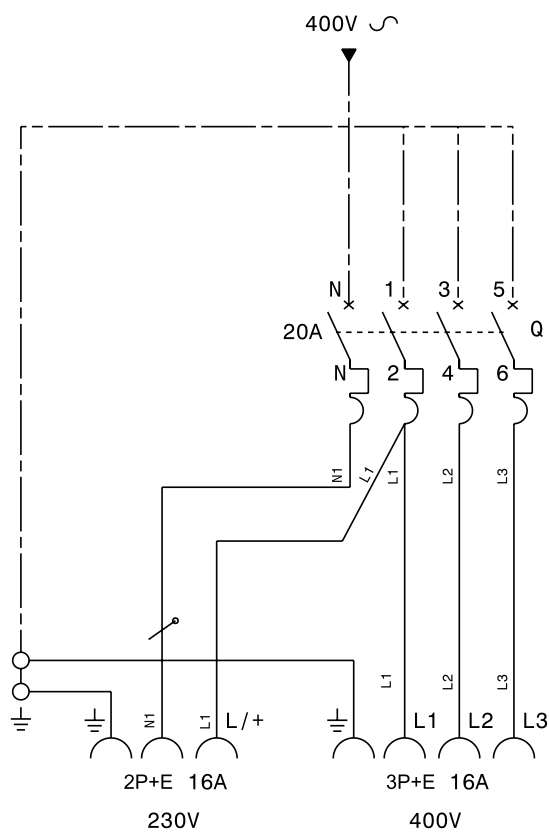


Cat. Nos. 0 589 30/31/37

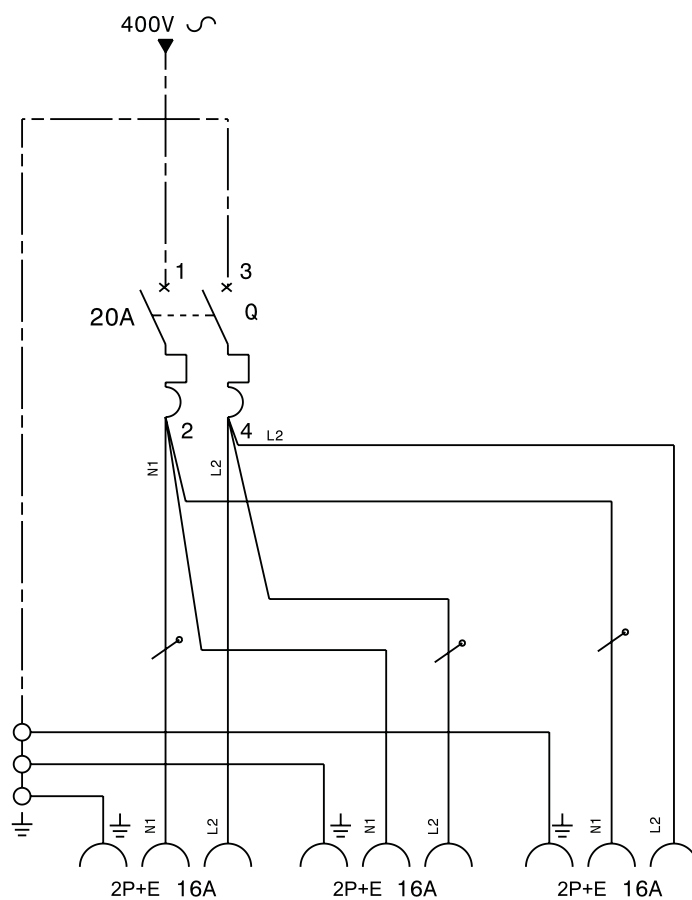


7. WIRING DIAGRAMS (continued)

Cat. No. 0 589 32

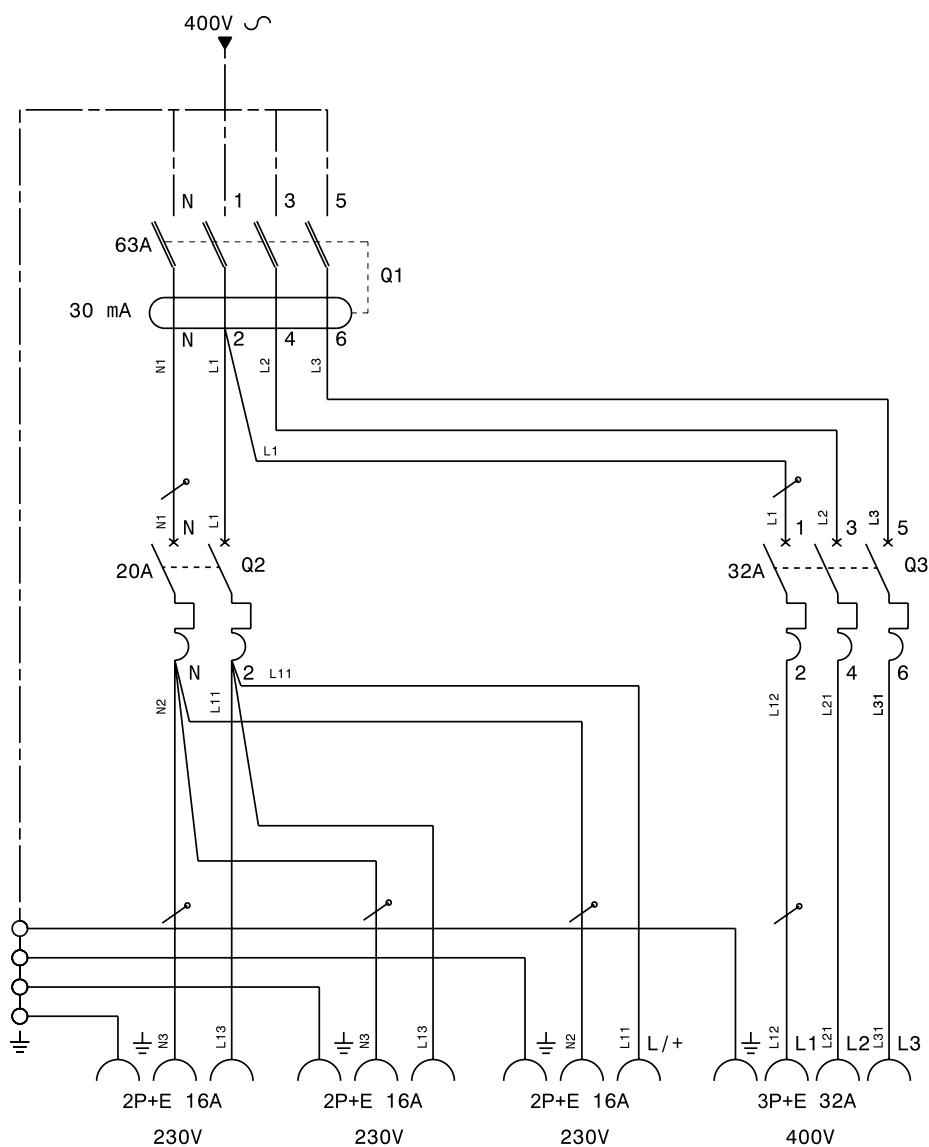


Cat. Nos. 0 589 33/34

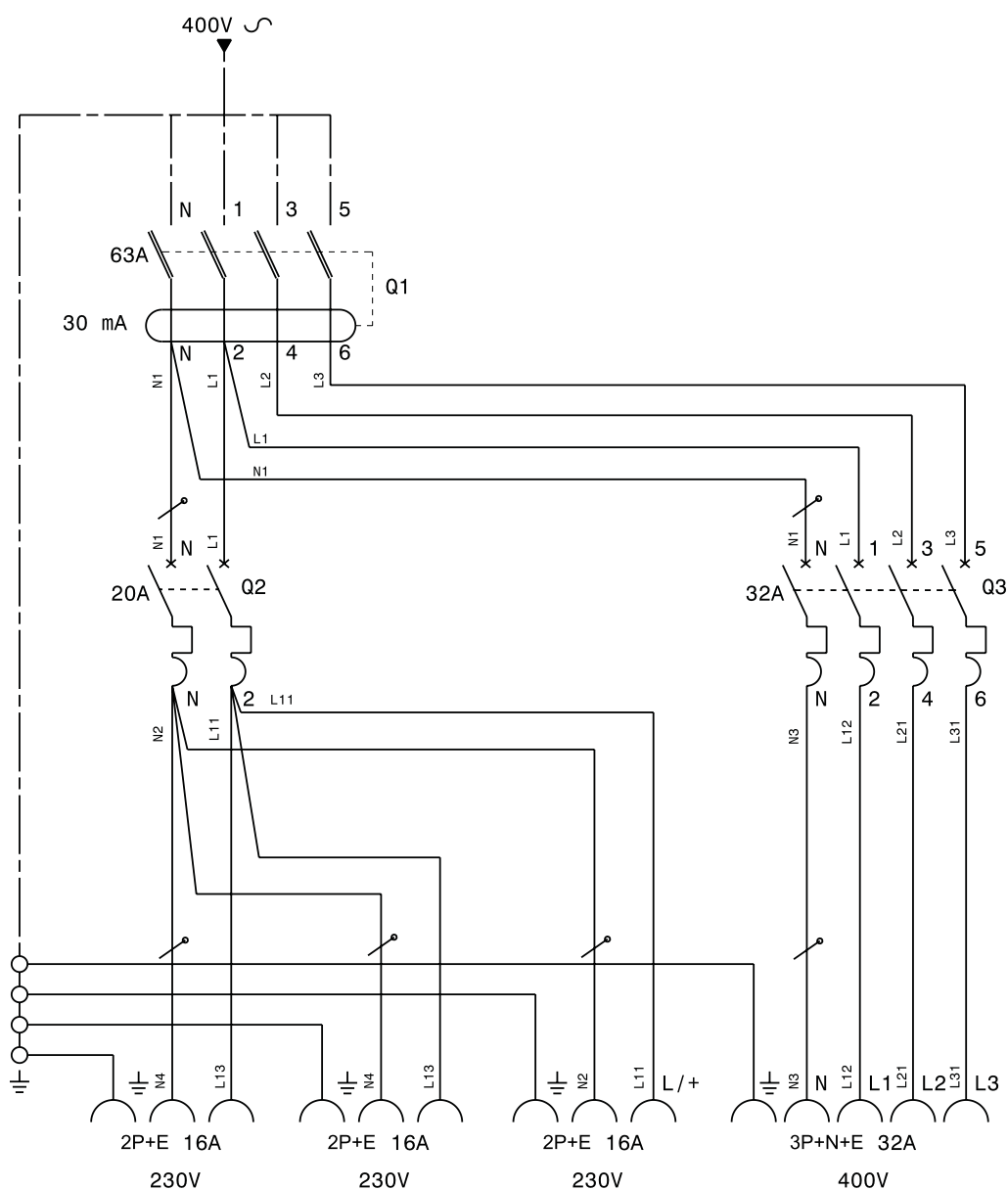


7. WIRING DIAGRAMS (continued)

Cat. No. 0 589 35



Cat. No. 0 589 36



8. STANDARDS

- EN 60309-1 and IEC 60309-1 (conception)
- EN 60309-2 and IEC 60309-2 (interchangeability)
- EN 60309-4 and IEC 60309-4 (with locking device)
- EN 60529 and IEC 60529
- EN 62262 and IEC 62262
- EN 610439-1 and IEC 61439-1

8.1 Standards 61 439

- IEC 61439-2 and IEC 61439-3

Low-voltage switchgear assembly normative change:

The IEC 60439 standard series has been replaced by the IEC 61439 standard series. This series describes the construction and verification requirements for low-voltage switchgear assemblies.

It is applicable to electricity distribution in industry, construction sites and household environments.

IEC 61439-1 defines the general rules, and cannot be used alone.

For each context of use, an IEC 61439- X standard is applicable. All the points discussed refer systematically to the relevant chapter of IEC 61439-1, adding any details or amendments associated with the context of use.

- IEC 61439-2: Power switchgear assemblies
- IEC 61439-3: Distribution boards intended to be operated by ordinary persons (DBO)
- IEC 61439-4: Particular requirements for assemblies for construction sites (ACS)

Important points in relation to switchgear assemblies:

Important points in relation to switchgear assemblies:

Definitions:

- Original manufacturer: Organisation that has carried out the original design and associated verification of an assembly
- Assembly manufacturer: Organisation taking responsibility for the completed assembly.
- User: Party who will specify, purchase, use and/or operate the assembly, or someone acting on their behalf.

Assembly manufacturer obligations

- Obligation to comply with the design and construction rules of IEC61439-x
- Obligation to test as per IEC61439
- Obligation to furnish a "Design Verification"
- Obligation to provide specific information:

On a label (or similar) attached to the product, legible on the installed product for some of the information to be provided.

In the "assembly manufacturer's" technical documentation for the remaining information to be provided (characteristics, handling instructions, installation, operation, maintenance).

Responsibilities:

The user is responsible for clearly specifying the installation and operating conditions (site, ambient temperatures, etc.).

The original manufacturer is responsible for carrying out the design, original manufacture, associated verifications and producing the technical documentation and verifications.

The assembly manufacturer producing an assembly is responsible for carrying out the mandatory tests and verifications. They must also issue a design verification and ensure compliance with information requirements.

The assembly manufacturer, if converting, supplementing or modifying an assembly in accordance with IEC61439, is responsible for carrying out further verifications, carrying out further tests, and providing further design and information verifications. In other words, in this case, the original manufacturer loses its status as an assembly manufacturer.

Note:

As regards the latter paragraph, the rationale applies for subsequent maintenance operations, with the exception of the replacement of a component if it is replaced by an identical apparatus to that specified on the verification or equivalent if its heat dissipation, once connected, is less than or equal to the original apparatus.

Legrand offering:

Legrand P17 range equipped units

All of the items in these two product ranges have been modified and verified in order to meet IEC61439-2 and/or IEC61439-3 requirements.

For all of these items, Legrand is classified as both an "original manufacturer" and as an "assembly manufacturer" as per the standard. We remain at your disposal to provide verifications.

The conditions of use (voltage, currents, ambient temperatures, etc.), assembly and wiring must correspond to the actual use.

Legrand P17 "bespoke" equipped units.

Based on the conditions of installation and use provided by the customer, our teams verify whether the envisaged configuration is eligible for the target IEC61439-X standard. If this is the case, following the order of the "bespoke" product, our teams will be able to provide the compliance documents on request.

Legrand P17 range ready-to-assemble units

These units are compatible with the IEC 61439-2 and/or IEC 61439-3 standards.

The compliance of the complete assembly is henceforth obligatorily within the remit of the “assembly manufacturer” (manufacturer finalising assembly and wiring). The manufacturer of the ready-to-assemble cabinet is not in a position to guarantee compliance, failing knowledge of the conditions of use and the possibility of carrying out the tests and verifications required by the standard. Hence, the verifications, tests, certificates and documents to be furnished are the responsibility of the manufacturer finalising the wiring. Therefore, the assembly manufacturer is responsible for the certification of the complete assembly with its equipment.

In brief: Standard or configured Legrand P17 equipped units suitable for qualifying for IEC61439-X offer installer clients a “ready-to-install” solution that is “verified, tested, validated as per the standard criteria”. The compliance documents are made available and make reference to the inspection body once the product is installed and used under the defined conditions.

Normative ambient temperature:

The cabinet is suitable for use in an environment from -5°C to +40°C (with a mean temperature < +35°C over 24 hours)

Overheating verification as per the standard IEC61439-1 + IEC61439-X:

Two types of overheating test are to be carried out: Individual tests and assembly tests

Individual tests:

Each circuit is tested individually at full load. (e.g. a C32 is charged to 32A)

Assembly tests:

The assembly must be tested with each circuit charged to its Rated current multiplied by the RDF coefficient of the cabinet without exceeding the Total current InA of the unit.

Where:

RDF = Cabinet rated diversity factor.

This factor, the value of which is recommended by the standard but which remains up to the choice of the manufacturer, accounts for the fact that not all the circuits of an assembly are ever charged to the maximum at the same time. The Legrand range complies with the values recommended by the standard.

E.g.: IEC61439-2 recommends an RDF of 0.9 between 2 and 3 circuits and an RDF of 0.8 between 4 and 5 circuits

Table 101 – Assumed load values	
Type of load	Assumed load factor
Distribution – 2 and 3 circuits	0.9
Distribution – 4 and 5 circuits	0.8
Distribution – 6 and 9 circuits	0.7
Distribution – 10 or more circuits	0.6
Electric controlgear	0.2
Motor ≤ 100 kW	0.8
Motors > 100 kW	1.0

IEC 61439-2

Table 101 – Assumed load values	
Number of output circuits	Assumed load factor
2 and 3	0.8
4 and 5	0.7
6 to 9 inclusive	0.6
10 and over	0.5

IEC 61439-3

InA = Unit rated current

This is the maximum load current of the unit. InA is used to design the protection to be set up at head end.

Overheating:

The standard stipulates maximum overheating levels not to be exceeded, when thermal stabilisation is achieved, on the input terminals, on the device handles, on accessible surfaces. etc.

Moreover, integrated products (circuit breakers, RCDs, connectors, etc.) must operate under temperature conditions permitted by their reference standard. Inside the unit, the ambient temperature is greater than its external temperature. Despite this, the products should function correctly.

As regards circuit breakers, the nominal characteristics are dependent on the temperature in their vicinity.

The equipped units have been tested at an external ambient temperature of 20°C, therefore greater inside. The indicated currents account for this. For other ambient temperature values, it is necessary to refer to the circuit breaker derating chart.

By way of example: derating chart of circuit breaker 4 077 84

In (A)	Ambient Temperature / In									
	- 25°C	- 10° C	0	10° C	20° C	30° C	40° C	50° C	60° C	70° C
0,5 A	0,62	0,6	0,57	0,55	0,52	0,5	0,47	0,42	0,40	0,38
1 A	1,5	1,4	1,3	1,2	1,1	1	0,9	0,8	0,7	0,6
1,5 A	1,9	1,8	1,7	1,7	1,6	1,5	1,5	1,4	1,4	1,3
2 A	2,8	2,6	2,5	2,3	2,2	2	2	1,9	1,8	1,7
3 A	3,8	3,6	3,5	3,3	3,2	3	2,9	2,8	2,7	2,6
3,5 A	4,5	4,2	4,0	3,9	3,7	3,5	3,4	3,3	3,2	3,1
5 A	6,4	6,0	5,8	5,5	5,3	5,0	4,8	4,7	4,5	4,6
6 A	7,5	7,0	6,6	6,4	6,2	6,0	5,8	5,6	5,4	5,3
10 A	12,5	11,5	11,1	10,7	10,3	10,0	9,7	9,3	9,0	8,7
13 A	16,3	15,0	14,3	13,9	13,4	13,0	12,6	12,1	11,7	11,3
16 A	20,0	18,7	18,0	17,3	16,6	16,0	15,4	14,7	14,1	13,5
20 A	25,0	23,2	22,4	21,6	20,8	20,0	19,2	18,4	17,6	16,8
25 A	31,5	29,5	28,3	27,2	26,0	25,0	24,0	22,7	21,7	20,7
30 A	38,3	36,0	34,5	33,0	31,5	30,0	28,8	27,3	26,1	24,9
32 A	41,0	37,8	36,5	34,9	33,3	32,0	30,7	29,1	27,8	26,5
40 A	51,0	48,0	46,0	44,0	42,0	40,0	38,0	36,0	34,0	32,0
50 A	64,0	60,0	57,5	55,0	52,5	50,0	47,5	45,0	42,5	40,0
63 A	80,6	75,6	72,5	69,9	66,1	63,0	59,8	56,1	52,9	49,7

Other tests stipulated by the standard:

Numerous tests and numerous verifications are stipulated in the standard in order to assess product compliance. (IP, Shock, Fire resistance, Di-electric voltage, Shock voltage, etc.)

All of these tests have been carried out. They confirm the compliance of the various items in the P17 “bespoke” unit range with the IEC61439-1 + IEC61439-2 standards and for the most part with IEC61439-1 + IEC61439-3.

8.2 Classification of P17 Cat. Nos. in relation to standard 61439

Cat. Nos.	Voltage	Frequency	Min. connection cross-section (mm ²)	Rated diversity factor (RDF)	Protection class	IEC 61439-2	InA	IEC 61439-3	InA	Protection class: class I or class II (double Insulation)
0 589 20	230V~	50/60 Hz	2.5 mm ² rigid	0.9	IP 44	YES	16	YES	16	
0 589 21	400V~	50/60 Hz	10 mm ² rigid	0.9	IP 44	YES	40	YES	30	
0 589 22	400V~	50/60 Hz	10 mm ² rigid	0.9	IP 44	YES	32	YES	32	
0 589 30	230V~	50/60 Hz	4 mm ² rigid	1	IP 44	YES	20	YES	20	
0 589 31	230V~	50/60 Hz	4 mm ² rigid	1	IP 44	YES	20	YES	20	
0 589 32	400V~	50/60 Hz	4 mm ² rigid	1	IP 44	YES	20	YES	20	
0 589 33	230V~	50/60 Hz	4 mm ² rigid	1	IP 44	YES	20	YES	20	
0 589 34	230V~	50/60 Hz	4 mm ² rigid	1	IP 44	YES	20	YES	20	
0 589 35	400V~	50/60 Hz	10 mm ² rigid	0.9	IP 44	YES	40	YES	40	
0 589 36	400V~	50/60 Hz	10 mm ² rigid	0.9	IP 44	YES	40	YES	29	
0 589 37	230V~	50/60 Hz	4 mm ² rigid	1	IP 44	YES	20	YES	20	

9. ACCESSORIES

9.1 Handles



Supplied with lugs to wind the cable for combined unit with:

5 Lexic modules (577 20/589 33): **Cat. No. 0 577 37**

12 Lexic modules: **Cat. No. 0 577 38**

18 Lexic modules: **Cat. No. 0 577 39**

9.2 Key lock

Cat. No. 0 577 35



For locking the viewing window for optimum safety

9.3 Emergency stop and emergency break

Plates with Osmoz buttons

Osmoz emergency stop button

Cat. No. 0 577 40

For cutting off the power supply to the units

Plate fixed on pre-drilled faceplate

Supplied in parts ready for assembly

Supplied with push-pull 2 NC contact block

Osmoz emergency break button

Cat. No. 0 577 45

For cutting off the power supply to the units

Plate fixed on pre-drilled faceplate

Supplied in parts ready for assembly

Supplied with push-pull 1 NO contact block

9.4 IP55 adaptor

Cat. No. 0 539 48

Takes Mosaic mechanisms

2 modules (except special surface mounting type)

No support frame needed



9. ACCESSORIES (continued)

9.5 Wall mounting lug

Cat. No. 0 019 69

Set of 4 wall mounting lugs

for 265 and 405 mm combined units

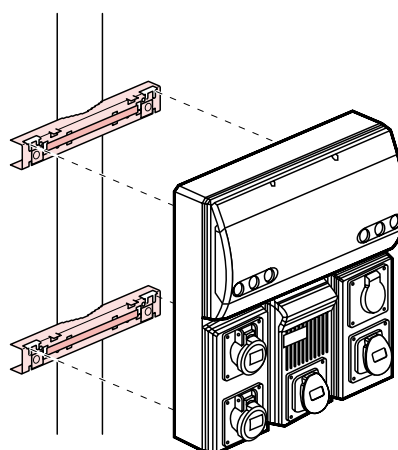
Vertical and horizontal mounting



9.6 Vertical plate mounting kit

Cat. Nos. 0 364 46/47/48/49

	0 364 46	0 364 47	0 364 48	0 364 49
0 577 01/03/05	---	---		---
0 577 02/04/06	---	---	---	
0 577 00/10 0 577 11/20 0 589 33		---	---	---
0 589 30/31/32 0 589 37/38		---	---	---
0 589 40/41 0 589 42/43	---		---	---
0 589 50/51/52 0 589 53/54/57	---		---	
0 598 41		---	---	---
0 598 43	---		---	---
0 598 46	---		---	---
0 589 22/34 0 589 35/36 0 598 47/48	---	---		---



9.7 Tensioner/crimper tool

Cat. No. 0 364 45

Used for tensioning and crimping the cable sleeve