

**2010**

## **ASEC INDUSTRIES PTE LTD**

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**[CONTROL CATALOGUE]**

Specification subject to change without prior notice

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## G. CABLES TRUNKING

### Special 3D Steel Enclosure



### Features and benefits



The double thickness profile, gutter shaped ensures a perfect seal and very good rigidity

#### Features

- Single door IP66, double door IP55
- 3 point locking 600mm high and above
- 53 sizes with plain door (IK10 mechanical protection) and 44 sizes glazed door (1K08 mechanical protection)
- 120 degree door opening
- Plain, perforated, DIN and modular chassis options
- IP66 stainless version accommodates the same accessories
- To achieve high IP, the double thickness front profile, gutter shaped ensures a perfect seal and very good rigidity, and door closure by 1 handle with 3 point locking (600mm height and above)
- Cruciform construction
- Bonded glazing ensures IP rating



The door can easily be removed and the hinging orientation changed

#### Benefits

- Wide choice of enclosure sizes and versions to suit application
- Secure access, key lockable (accessory)
- Reduced inventory, accessories fit other wall boxes
- Choice of equipment mounting options to provide the simplest solution
- Enclosure can be mounted with door hinged right or left to suit available space

#### Approvals and certification

- EN 50298
- UL
- CSA
- LCIE

#### Marine approval

- BV
- LRS
- GL

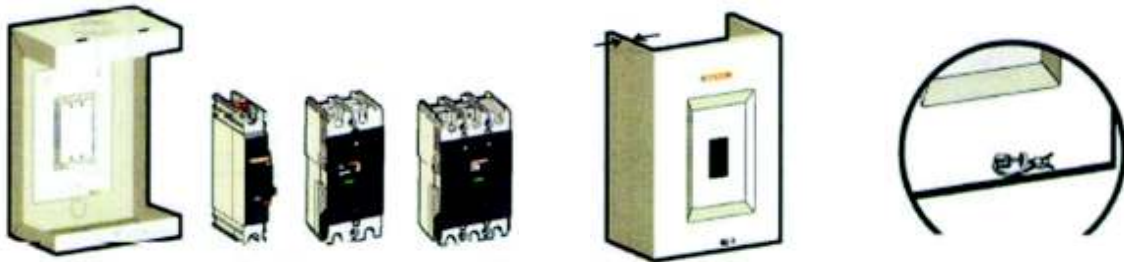
External dimensions (mm)			Steel enclosure plain door with chassis	
Height	Width	Depth	Reference	
300	200	150	ENN83315	
		150	▲ ENN83301	
	300	150	ENN83302	
		200	ENN83303	
	400	150	ENN83312	
		200	▲ ENN83304	
400	300	150	ENN83317	
		200	ENN83318	
	400	200	ENN83319	
		250	ENN83332	
	600	200	ENN83331	
		250	ENN83332	
500	300	200	ENN83321	
		200	ENN83323	
	400	200	ENN83323	
		250	ENN83324	
	500	200	ENN83322	
		250	ENN83325	
600	400	200	ENN83326	
		250	ENN83327	
	500	250	▲ ENN83340	
		200	ENN83328	
	600	200	ENN83328	
		250	ENN83329	
	800	300	ENN83330	
		400	ENN83339	
	800	300	ENN83337	
		500	250	ENN83335
700	600	200	ENN83343	
		250	ENN83356	
	800	250	ENN83357	
		400	ENN83344	
	800	250	ENN83345	
		300	ENN83346	
	1000	300	ENN83347	
		300	▲ * ENN83355	
	1000	1200	300	▲ * ENN83348
			250	ENN83354
600		300	▲ ENN83358	
		400	ENN83359	
800		250	ENN83360	
		300	ENN83361	
1000		400	ENN83362	
		300	ENN83370	
1200		300	* ENN83363	
		400	* ENN83366	
1200	600	300	▲ ENN83373	
		400	▲ ENN83374	
	800	300	ENN83364	
		400	ENN83367	
	1000	300	ENN83371	
		300	* ENN83365	
	1200	400	▲ * ENN83375	
		300	▲ * ENN83376	
		400	▲ * ENN83377	

★ 2 doors version

▲ These references will be available in June 2008

Accessories	Description	Reference	
<b>Wall fixing lugs</b>	Material (set of 4):	Steel <b>ENN51206</b>	
		Stainless steel <b>ENN51207</b>	
<b>Step slides</b>	Depth (set of 4):	200 <b>ENN51720</b>	
		250 <b>ENN51725</b>	
		300 <b>ENN51730</b>	
		400 <b>ENN51740</b>	
<b>Door stop</b>	Standard	<b>ENN51210</b>	
<b>Document pocket</b>	A4	<b>ENN21322</b>	
	A3	<b>ENN21317</b>	
<b>Locks</b>	Insert shape/ type	Double bar 3mm <b>ENN51328</b>	
	Key handle barrels with keys	Key 421 <b>ENN51334</b>	
<b>Thermostat</b>	Setting range: 0 ~ +60 °C adjustable	N/O contact <b>ENN87561</b>	
	Max. rating: 10 A, 250 V	N/C contact <b>ENN87562</b>	
<b>Resistance heaters</b>	Power at 20 °C:	20 W With cable 0, 3m <b>ENN17502</b>	
	Voltage: 110-250 VAC and 110-250 VDC	55 W With terminal block <b>ENN17506</b>	
		90 W With terminal block <b>ENN17509</b>	
<b>Fan with filter</b>	RAL 7032	Airflow (m <sup>3</sup> /h):	85 170 x 150 <b>ENN87901</b>
		Free flow (fan with filter)	165 268 x 248 <b>ENN87902</b>
		Voltage: 230 V	300 268 x 248 <b>ENN87903</b>
		Frequency: 50 Hz	562 336 x 316 <b>ENN87904</b>
		IP 54	838 336 x 316 <b>ENN87905</b>
<b>Standard filters</b>	Dimension (mm): For fans and grills	170 x 150 <b>ENN87917</b>	
		268 x 248 <b>ENN87918</b>	
		336 x 316 <b>ENN87919</b>	
<b>Outlet grills</b>	Dimension (mm): IP 54	137 x 117 <b>ENN87910</b>	
		170 x 150 <b>ENN87911</b>	
		268 x 248 <b>ENN87912</b>	
		336 x 316 <b>ENN87913</b>	
<b>IP 55 Protection kit</b>	For fans and grills Aluminium & zinc alloy	170 x 150 <b>ENN87980</b>	
		268 x 248 <b>ENN87981</b>	
		336 x 316 <b>ENN87982</b>	

## EasyBox (For EastPact™ Circuit Breaker)



- Possible for 1,2,3-pole of EasyPact 100
- Big side space - easy to install breaker and wiring

- 1 mm metal sheet thickness

- Lead seal- maximize user safety

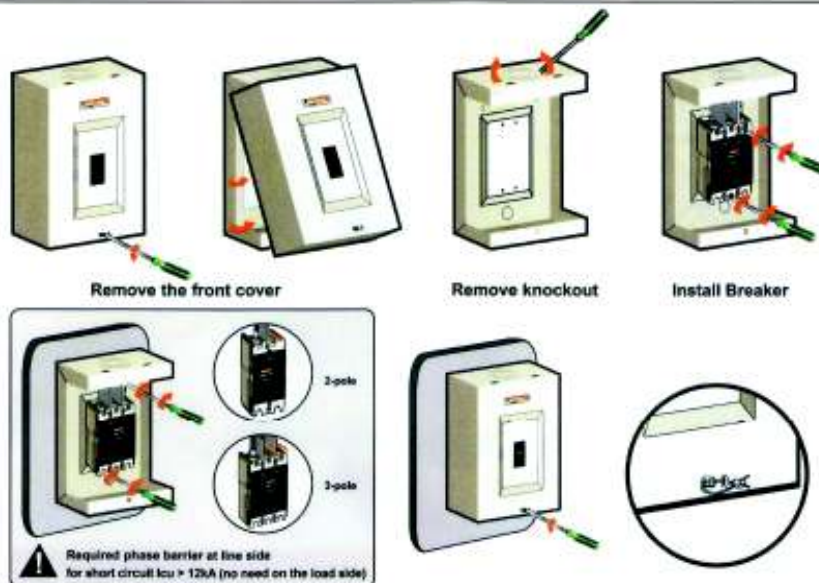
### EasyBox

Metal box for EasyPact™ circuit breaker 100AF









- Part number: EZABOXC
- Comply IEC 60439-1
- Wall mounting box
- IP4X front face
- Ground connection available inside
- Knock out up to 2 inches diameter accept most size of conduits



### Installation Manual



## Legrand Enclosure - Modular chassis for IP 55 cabinets

Pack	Cat.No		Plan door	With window	
		<b>Atlantic (metal)</b> <b>Marina (polyester)</b>			
		IP 55-9 conform to NF C 20-010 IP 55 conform to IEC 529 Chassis supplied with plastic front plates Class III (double insulated) with Marina cabinet			
		<b>400 x 300 x 200 mm</b> <b>30 modules : 3 rows of 10 modules<sup>(1)</sup></b>			
1	0361 01	For Atlantic For Marina	0355 02 0352 51	0354 92 0352 71	
		<b>500 x 400 x 200 mm</b> <b>48 modules : 3 rows of 16 modules<sup>(1)</sup></b>			
1	0361 02	For Atlantic For Marina	0355 03 0352 52	0354 93 0352 72	
		<b>600 x 400 x 250 mm</b> <b>48 modules : 3 rows of 16 modules<sup>(1)</sup></b>			
1	0361 03	For Atlantic For Marina	0355 08 0352 55	0354 94 0352 75	
		<b>700 x 500 x 250 mm</b> <b>84 modules : 4 rows of 21 modules<sup>(1)</sup></b>			
1	0361 05	For Atlantic For Marina	0355 12 0352 56	0354 95 0352 76	
		<b>800 x 600 x 300 mm</b> <b>108 modules : 4 rows of 27 modules<sup>(2)</sup></b>			
1	0361 06	For Atlantic For Marina	0355 23 0352 61	0354 96 0352 81	
		<b>1 000 x 800 x 300 mm</b> <b>190 modules : 5 rows of 38 modules<sup>(2)</sup></b>			
1	0361 09	For Atlantic For Marina	0355 27 0352 63	0354 97 0352 83	
		<b>1 200 x 800 x 300 mm</b> <b>228 modules : 6 rows of 38 modules<sup>(2)</sup></b>			
1	0361 10	For Atlantic	0355 92		
<b>Accessories</b>					
<b>Mounting plates for m.c.c.bs</b>					
For DPX 63 A, DPX 100 A, DPX 125 A, DPX 125 A + side mounting, DPX 160 A, DPX 160 A + earth leakage module, Vistop 160 A (and Vistop 250 A on Cat.No 0360 45 only)					
1	0360 44	For 800 x 600 mm cabinets			
1	0360 45	For 1 000 x 800 mm and 1 200 x 800 mm cabinets			
10	0361 00	<b>Blanking plate</b> 38 modules			

(1) Supplied with blanking plates for modular window  
(2) Supplied with 2 blanking plates for modular window



036103 + 035494



## Legrand Enclosure - Wall mounting enclosure IP55- IK10

IP 55 to IEC 60529, IK 10 to EN 50102

**Grey RAL 7032**

**UL listed (1 door Nema 4X, 2 door Nema 12X) CSA, Bureau Veritas, GOST TUV**

60 µ thick textured polyester coating  
 Excellent resistant to corrosion and chemical agents  
 Reversible door with key lock  
 Automatic positioning of equipment onto the active  
 Corners with M8 fixings  
 Single locking irrespective of size with 2433 A key  
 One, two or three closing points subject to size  
 Polyurethane door seal and gutter to shed water  
 Gland plate (except Cat. No: 0355 00)  
 Provision to fix optional runners and brackets for  
 Depth adjustment on enclosure of 250 mm and  
 greater depth (from 600 x 600 mm)



	Nominal external dimensions (mm) Height x Width x Depth <sup>(1)</sup>	Weight (kg)	
1	0355 00	300 x 200 x 160 <sup>(2)</sup>	4.2
1	0355 30	300 x 300 x 200	6
1	0355 01	300 x 400 x 200	6.5
1	0355 02	400 x 300 x 200	6.5
1	0355 31	400 x 400 x 200	12
1	0355 03	500 x 400 x 200	9.7
1	0355 04	600 x 400 x 200	10.7
1	0355 06	400 x 600 x 250	11.7
1	0355 07	500 x 400 x 250	10.7
1	0355 32	500 x 500 x 250	14
1	0355 08	600 x 400 x 250	12
1	0355 10	600 x 600 x 250	16.3
1	0355 12	700 x 500 x 250	16.5
1	0355 14	800 x 600 x 250	24
1	0355 15	800 x 800 x 250	31
1	0355 33 <sup>(3)</sup>	800 x 1000 x 250	40.5
1	0355 17	1000 x 600 x 250	24.6
1	0355 18	1000 x 800 x 250	36.4
1	0355 20	600 x 600 x 300	21.1
1	0355 22	700 x 500 x 300	23
1	0355 23	800 x 600 x 300	28.8
1	0355 24	800 x 800 x 300	34.2
1	0355 34 <sup>(3)</sup>	800 x 1000 x 300	42.5
1	0355 26	1000 x 600 x 300	33.3
1	0355 27	1000 x 800 x 300	42
1	0355 91 <sup>(4)</sup>	1000 x 1000 x 300	53
1	0355 92	1200 x 800 x 300	49.6
1	0355 93 <sup>(4)</sup>	1200 x 1000 x 300	62.2
1	0355 94 <sup>(4)</sup>	1200 x 1200 x 300	70
1	0355 95 <sup>(4)</sup>	1400 x 1000 x 300	71
Some enclosures of 400 mm depth can be fitted with a plinth, see opposite			
1	0355 36	600 x 600 x 400	32
1	0355 28	800 x 600 x 400	31
1	0355 29	1000 x 800 x 400	45
1	0355 96 <sup>(4)</sup>	1200 x 800 x 400	57
1	0355 97 <sup>(4)</sup>	1200 x 1200 x 400	77
1	0355 98 <sup>(4)</sup>	1400 x 800 x 400	64

(1) Applied for  
 (2) Supplied with plain plate and key closure (no handle)  
 (3) Enclosure with 2 doors  
 (4) Excluding lock

### Beige RAL 7032 with altuglass window

	Beige 7032	Altuglass window supplied with key barrel 2433A		Weight (kg)
		External dimensions (mm) Height x Width x Depth	Window dimensions (mm) Height x Length	
1	0354 92	400 x 300 x 200	260 x 180	6
1	0354 93	500 x 400 x 200	360 x 260	8
1	0354 94	600 x 400 x 250	460 x 260	10
1	0354 95	700 x 500 x 250	560 x 360	15
1	0354 96	800 x 600 x 300	660 x 460	25
1	0354 97	1000 x 800 x 300	760 x 660	36

### Accessories for Atlantic cabinets

		<b>Set of 4 runners and brackets studs</b> equipped with
1/10	0367 43	For cabinets depth 250 mm (starting from 600 x 600)
1/10	0367 44	For cabinets depth 300 mm
1/10	0367 45	For cabinets depth 400 mm
		<b>Set of 4 wall mounting lugs</b>
10	0364 01	Zamak, supplied with finish cover - 300 kg
1/10	0364 04	for load up to 100kg

### RAL 7021 single piece bases

	Three openings Base thickness: 200 mm For cabinets width x depth (mm)	Weight (kg)	
1	0363 40	600 x 400	6.7
1	0363 41	800 x 400	10.2
1	0363 43	1200 x 400	13.6

### Primer for customer application

1	0365 95	1 kg pot For all Atlantic and Marina cabinets Provides an excellent base for all types of paint without the need for sanding Red - Brown colour Supplied complete with hardener and a thinner Covers an area 8 to 10 m <sup>2</sup> /kg Can be applied with a brush or a gun
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### Set of attachment lugs for symmetric rail

5/50	0367 36	For M6 screws (supplied) Used to attach the symmetric rail Depth: 15 mm on door profile uprights
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# Legrand Enclosure - Wall mounting enclosure IP66- IK10



**IP 66 - IK 10**  
**IP 66 conforms to IEC 60529. NF C 20-010**  
**Certified UL, Néma 4 x, CSA, Bureau Vértias,**  
**GOST, LRS. LCIE N° 380 584 A B.**

**For use in:**

- areas requiring high level of hygiene, such as
  - food manufacturing plants
  - distilleries
  - industrial kitchens
  - clean rooms

• corrosive conditions such as:

- chemical industries
- pharmaceutical industries
- petroleum industries
- paper industries

cabineets in 304 L stainless steel :  
 AFNOR Z3 CN 18/10 according to standard  
 NF A 35-573

Brushed stainless steel finish  
 Rounded door, protective flange, reversible cabinet  
 Equipment fixing on M8 studs  
 Cat No 0352 11/13 fixed using runners + bracket  
 studs

Supplied complete with double bar locks

	External dimension (mm) Height x Width x Depth	Weight (kg)
1	0352 00 300 x 200 x 160	4
1	0352 01 400 x 300 x 200	5,8
1	0352 02 500 x 400 x 200	8,3
1	0352 05 600 x 400 x 250	12
1	0352 06 700 x 500 x 250	15
1	0352 11 800 x 600 x 300	22
1	0352 13 1 000 x 800 x 300	36
1	0352 14 1 200 x 800 x 300	45
1	0352 15 1 400 x 800 x 400	66

**Set of 4 wall mounting lugs**

Supplied with screws

1/20 0364 06 Stainless steel (300 kg)

**Set of 4 depth adjustment runners**

for 250 deep enclosures

(600 x 600 and larger)

1/10 0367 43 for 250 deep enclosures

(600 x 600 and larger)

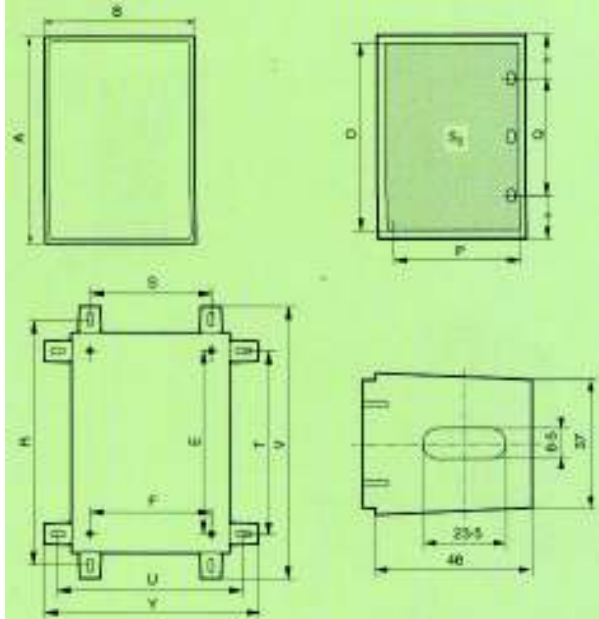
1/10 0367 44 for 300 deep enclosures

(600 x 600 and larger)

1/10 0367 45 for 400 deep enclosures

(1) Supplied with plain plate

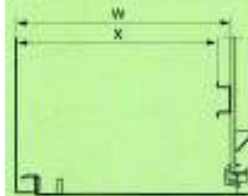
**Dimensions**



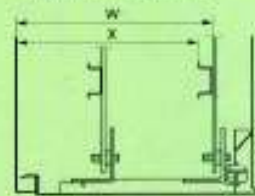
Height	Width	Double door open	Lock positions	Vertical wall lugs	Horizontal wall lugs
A (mm)	B (mm)	C (mm)	P (mm)	Q (mm)	R (mm) S (mm) T (mm) U (mm)
300	200	250	150	350	150 250 250
400	300	350	250	450	250 350 350
500	400	450	350	550	350 450 450
600	400	550	350	650	350 450 450
700	500	650	450	750	450 550 550
800	600	750	550	850	550 650 650
1 000	800	950	750	1 050	750 850 850
1 200	800	1 150	750	1 250	750 850 850
1 400	800	1 350	750	1 350	750 850 850

Height	Width	E	F	U	V
A (mm)	B (mm)	(mm)	(mm)	(mm)	(mm)
300	200	225	140	380	250
400	300	325	240	480	350
500	400	425	340	580	450
600	400	525	340	680	450
700	500	625	440	780	540
800	600	725	540	880	630
1 000	800	925	740	1 080	830
1 200	800	1 125	740	1 280	830
1 400	800	1 325	740	1 480	830

**Position of equipment without runners**



**Adjustment of equipment with runners (optional)**



Depth (mm)	Without runners		Runners Cat. Noo	4 W81 runners		
	W (mm)	X (mm)		min	W max	X max
160	140	125	-	-	-	-
200	180	165	-	-	-	-
250	230	215	0367 43	93	213	78 196
300	280	265	0367 44	93	263	78 246
400	380	365	0367 45	93	363	78 346

## Legrand Panel - IP 55 and IP 66 - IK 10 - Nema 4x - Nema 12



IP55 according to IEC 60529 for 2 door enclosures and IP66 according to IEC 60529 for 1 door enclosures, IK 10 according to IEC 62262 UL listed (1 door Nema 4x, 2 door Nema 12) CSA, Bureau Veritas, TUV, GÖST EMC attenuation 20dB

60 µm thick textured polyester coating provides excellent resistance to corrosion and chemical agents

Automatic positioning of equipment on to active corners with M8 fixings

Reversible door and single lock with 2 x 2433 A keys irrespective of size 300 mm high enclosures have key closure (no handle)

One, two or three closing points depending on size

Enclosures of 500 mm high and above have door uprights

Polyurethane door seal and gutter to shed water Gland plate (except Cat.No.0355 00/05/09) Provision to fix optional runners and brackets for depth adjustment in enclosures from 600 x 600 mm

Pack	Cat. Nos.	Enclosures grey RAL 7035		Weight (kg)	Number of doors
		Nominal external dimensions (mm) Height x Width x Depth <sup>(1)</sup>			
1	0355 05 <sup>(1)</sup>	300 x 300 x 160 <sup>(1)</sup>	4.1	1	
1	0355 09 <sup>(1)</sup>	400 x 300 x 160	6.3	1	
1	0355 00 <sup>(1)</sup>	300 x 200 x 160 <sup>(2)</sup>	4.2	1	
1	0355 30	300 x 300 x 200 <sup>(3)</sup>	4.2	1	
1	0355 01	300 x 400 x 200 <sup>(4)</sup>	6.5	1	
1	0355 02	400 x 300 x 200	6.5	1	
1	0355 31	400 x 400 x 200	7.7	1	
1	0355 03	500 x 400 x 200	9.7	1	
1	0355 04	600 x 400 x 200	10.7	1	
1	0355 06	400 x 600 x 250	11.7	1	
1	0355 07	500 x 400 x 250	10.7	1	
1	0355 32	500 x 500 x 250	11.5	1	
1	0355 08	600 x 400 x 250	12	1	
1	0355 10	600 x 600 x 250	16.3	1	
1	0355 12	700 x 500 x 250	16.5	1	
1	0355 14	800 x 600 x 250	18.8	1	
1	0355 15	800 x 800 x 250	21.6	1	
1	0355 33	800 x 1000 x 250	27	2	
1	0355 17	1000 x 600 x 250	24	1	
1	0355 18	1000 x 800 x 250	36.4	1	
The following enclosures can be mounted on to 200 mm high plinths					
1	0355 20	600 x 600 x 300	21.1	1	
1	0355 21	600 x 800 x 300	28.8	2	
1	0355 37	600 x 1000 x 300	33.3	2	
1	0355 22	700 x 500 x 300	23	1	
1	0355 23	800 x 600 x 300	28.8	1	
1	0355 24	800 x 800 x 300	34.2	1	
1	0355 34	800 x 1000 x 300	32	2	
1	0355 26	1000 x 600 x 300	33.3	1	
1	0355 27	1000 x 800 x 300	42	1	
1	0355 91	1000 x 1000 x 300	53	2	
1	0355 90	1000 x 1200 x 300	62.2	2	
1	0355 92	1200 x 800 x 300	49.6	1	
1	0355 93	1200 x 1000 x 300	62.2	2	
1	0355 94	1200 x 1200 x 300	70	2	
1	0355 95	1400 x 1000 x 300	71	2	
1	0355 36	600 x 600 x 400	28	1	
1	0355 28	800 x 600 x 400	31	1	
1	0355 29	1000 x 800 x 400	45	1	
1	0355 96	1200 x 800 x 400	57	1	
1	0355 97	1200 x 1200 x 400	77	2	
1	0355 98	1400 x 800 x 400	64	1	

- (1) Depth excluding lock  
 (2) Supplied with plain plate and key closure (no handle)  
 (3) Key closure (no handle)  
 (4) With no opening  
 (5) With no opening. Supplied with plain plates

# Legrand Panel Chassis - Equipment for wall mounting enclosures



Pack	Cat. Nos.		Mounting plates			
			<b>Plain and Lina 12-5 perforated</b>			
			Pre-galvanised steel			
			Plain : 2 mm thick up to 400 x 400 3 mm thick from 400 x 600			
			Lina 12-5 : 2 mm thick			
			Ø 6-5 mm for rivets Cat. No. 0366 44			
			Ø 3-5 mm for equipment screws Cat. No. 0347 45 (see p. 252)			
			For enclosure dimensions Height x Width (mm)			
			Plain plate weight (kg)	Lina 12-5 weight (kg)		
1	0360 49	0360 01 <sup>(1)</sup>	0-9	0-47	300 x 220	
1	0360 69	0360 02	1	0-6	300 x 300	
1	0360 52	0360 04 <sup>(2)</sup>	1-3	0-8	300 x 400	
1	0360 52 <sup>(2)</sup>	0360 04 <sup>(2)</sup>	1-3	0-8	400 x 300	
1	0360 70	0360 05	1-7	1-1	400 x 400	
1	0360 56 <sup>(2)</sup>	0360 22 <sup>(2)</sup>	3-3	2-2	400 x 600	
1	0360 55	0360 09	2-7	1-5	500 x 400	
1	0360 71	0360 14	3-5	1-85	500 x 500	
1	0360 56 <sup>(2)</sup>	0360 22 <sup>(2)</sup>	3-3	2-2	600 x 400	
1	0360 57	0360 24	6-2	3-7	600 x 600	
1	0360 59 <sup>(2)</sup>	0360 33 <sup>(1)</sup>	8-4	5-2	600 x 800	
1	0360 54 <sup>(2)</sup>	0360 40	10-6	6-8	600 x 1000	
1	0360 58	0360 31	6	3-7	700 x 500	
1	0360 59 <sup>(2)</sup>	0360 33 <sup>(1)</sup>	8-4	5-2	800 x 600	
1	0360 60	0360 34	11-4	7	800 x 800	
1	0360 61 <sup>(2)</sup>	0360 42 <sup>(2)</sup>	14-4	9-2	800 x 1000	
1	0360 54 <sup>(2)</sup>	0360 40	10-6	6-8	1000 x 600	
1	0360 61 <sup>(2)</sup>	0360 42 <sup>(2)</sup>	14-4	9-2	1000 x 800	
1	0360 63	0360 43	20-5	11-5	1000 x 1000	
1	0360 65	0360 47 <sup>(2)</sup>	23	13-9	1000 x 1200	
1	0360 64		18-5		1200 x 800	
1	0360 65 <sup>(2)</sup>	0360 47 <sup>(2)</sup>	23	13-9	1200 x 1000	
1	0360 66		34-4		1200 x 1200	
1	0360 67 <sup>(2)</sup>		26-4		1400 x 800	
1	0360 68		32-2		1400 x 1000	

Fixing accessories are supplied in each enclosure

### Lina 25 perforated

Zinc plated sheet metal  
1-5 mm thick up to 600 x 400  
2 mm thick from 600 x 600  
Accepts clip nut fixings

1	Lina 25	For enclosure dimensions Height x Width (mm)	Weight (kg)
1	0360 12	400 x 300	0-6
1	0360 15	500 x 400	0-9
1	0360 16	600 x 400	1-3
1	0360 17	600 x 600	2-1
1	0360 18	700 x 500	2
1	0360 19	800 x 600	3-1
1	0360 21	1 000 x 800	4-9

Fixing accessories are supplied in each enclosure

(1) Marina only  
(2) The same plate is used for both vertical and horizontal enclosures  
(3) For Atlantic steel and Atlantic stainless steel enclosures



Pack	Cat. Nos.	Internal doors grey RAL 7035 - IP xxB		
		Fit Marina and Atlantic stainless steel enclosures. Also suitable for Atlantic steel enclosures when used with mounting kit Cat. No. 0363 69		
		For mounting of control and signaling units		
		Reversible, easy to fix, robust 4 mm thick GRP construction		
		For enclosures (mm) H x W	Dim. (mm) H x W	Usable area (mm) H x W
1	0363 59	400 x 300	341 x 236	305 x 185
1	0363 60	500 x 400	441 x 336	405 x 250
1	0363 61	600 x 400	541 x 336	505 x 250
1	0363 62	700 x 500	642 x 436	500 x 340
1	0363 63	800 x 600	742 x 536	600 x 440
1	0363 64	1 000 x 800	942 x 736	800 x 640
1	0363 65	1 200 x 800	942 x 736	800 x 640

0363 69 Mounting kit for Atlantic steel enclosures

**Insulated modular chassis grey RAL 7035**

Separate ABS front plate per row  
Supplied in kit form with metal uprights and crosspieces  
Grey RAL 7035 front plate  
Symmetrical rails L depth 15 mm  
Fixings supplied with enclosure

1	Cat. Nos.	For enclosure dimensions Height x Width x Depth (mm)	Weight (kg)
1	0361 01	400 x 300 x 200	11-5
		30 modules (3 rows of 10) Supplied with 1 blanking plate	
1	0361 02	500 x 400 x 200	13-9
		48 modules (3 rows of 16) Supplied with 1 blanking plate	
1	0361 03	600 x 400 x 250	15-5
		48 modules (3 rows of 16) Supplied with 1 blanking plate	
1	0361 05	700 x 500 x 250	17-5
		84 modules (4 rows of 21) Supplied with 1 blanking plate	
1	0361 06	800 x 600 x 300	19-5
		108 modules (4 rows of 27) Supplied with 2 blanking plates	
1	0361 09	1 000 x 800 x 300	21-5
		190 modules (5 rows of 38) Supplied with 2 blanking plates	

**Blanking plate for windows**

10 0361 00 For enclosures up to 800 mm wide  
Blanking plate to suit up to 670 x 45 mm window  
To be cut to required length

## Legrand Panel stainless steel - IP 66 - IK 10 - Nema 4x



IP 66 according to IEC 60529, IK 10 according to IEC 62262, EN 50102 UL listed (Nema 4x)

CSA, Bureau Veritas, GÖST, LRS, LCIE N° 380 584 A B

Stainless steel 304 L : Standard offer

For use in :

- areas requiring a high level of hygiene :
- food processing plants
- dairies
- industrial/commercial kitchens
- corrosive conditions :
- chemical plants
- pharmaceutical industry
- petroleum industry
- paper industry

Rounded door, protective flange, reversible enclosure

Automatic positioning of equipment on to active corners with M8 fixings

Provision to fix optional runners and brackets for depth adjustment in enclosures from 600 x 400 x 250 mm

Pack	Cat. Nos.	Stainless steel enclosures <sup>(1)</sup>	Weight (kg)
		External dimensions (mm) Height x Width x Depth	
1	0352 00 <sup>(2)</sup>	300 x 200 x 160	4
1	0352 01	400 x 300 x 200	5-6
1	0352 02	500 x 400 x 200	8-9
1	0352 03	600 x 400 x 200	10-8
1	0352 05	600 x 400 x 250	12
1	0352 06	700 x 500 x 250	15
1	0352 11	800 x 600 x 300	22
1	0352 13	1000 x 800 x 300	38
1	0352 14	1200 x 800 x 300	45
1	0352 15	1400 x 800 x 400	66

		Stainless steel enclosures with tempered glass window		Weight (kg)
		External dimensions (mm) Height x Width x Depth	Window dimensions (mm) Height x Width	
1	0352 21	400 x 300 x 200	300 x 128	7-6
1	0352 22	500 x 400 x 200	400 x 228	8-5
1	0352 23	600 x 400 x 200	500 x 228	9-6
1	0352 25	600 x 400 x 250	500 x 228	12
1	0352 26	700 x 500 x 250	600 x 328	15
1	0352 31	800 x 600 x 300	700 x 428	25
1	0352 33	1000 x 800 x 300	950 x 628	38

		Set of 4 wall mounting brackets
		Supplied with screws
1	0364 06	Stainless steel (300 kg max. load)

(1) Cat. Nos. 0352 00/01 are fitted with 1 lock, all others are fitted with 2 locks  
(2) Supplied with plain plate

### Technical information

Stainless steel enclosures provide a solution in harsh, aggressive environments such as chemical plants or offshore

	304 L in %
Carbon	< 0.03
Chromium	18 to 19
Nickel	9 to 11

### Corrosion resistance

	304 L
To salt spray (SS)	1 000 hrs
To sulphur dioxide (SO <sub>2</sub> )	1 000 hrs

### Brushed satin finish

Polygrain 180

- Ra 0.25 to 0.35 µm

- Rt 2.5 to 4 µm

### Stainless steel properties

**304 L** : Provides good resistance to :

- nitric acid at concentrations of 52 % at all temperatures (or 98 % when cold)
- cold dilute organic acids
- alkaline solutions (unless hot or above 50 %)
- saline solutions other than chlorides, sulphides and sulphates
- fresh water and natural atmosphere with low carbon content
- food products (except mustard and white wine)

### Physical properties

Specific weight - density : 8

Coefficient of expansion : 16 µ / m °C

Specific heat : 500 J / kg °C

Electrical resistivity : 0.75 µΩ mm<sub>2</sub>

Thermal conductivity : 15 W / m °C

The only way of guaranteeing excellent resistance to intercrystalline corrosion is the low carbon content (0.03 %) of 304 L stainless steel

### Different country names

		304 L
France	AFCOR / FEN	X1 CrNi 18-10 X2 CrNi 19-11
Germany	DM	X 2 CrNi 19-11 (DIN EN 1-4 306)
USA	AISI	304 L

304 L grade enclosures are fitted with Mazak double bar locks, epoxy coated

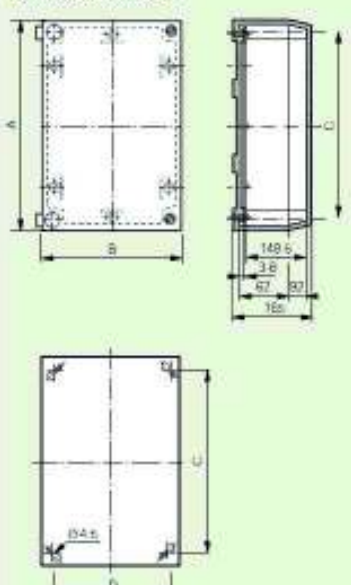
## Legrand Terminal strip - Nylbloc



Pack	Cat. No.	Nylbloc				
		12 way strips with captive screws Conform to BS EN 60998 Supplied with screws open Polypropylene -25 °C to +100 °C (temperature) Ambient temperature -25 °C to +55 °C				
		Capacity (mm)	Non-insulating (A)	Demister Ø	Current max. (A)	Dimensions (mm)
	Black					
10	0342 11	4	2.5	2.5	24	15.6 x 94 x 12.3
10	0342 13	6	6	3.5	41	18 x 107 x 14.4
10	0342 15	10	10	4.5	57	20.8 x 135.1 x 17.4
10	0342 17	16	16	5.5	76	24.2 x 156.8 x 22.5
10	0342 19	25	25	7	101	33 x 214 x 27.5
	White					
10	0342 21	4	2.5	2.5	24	15.6 x 94 x 12.3
10	0342 23	6	6	3.5	41	18 x 107 x 14.4
10	0342 25	10	10	4.5	57	20.8 x 135 x 17.4
10	0342 27	16	16	5.5	76	24.2 x 156.8 x 22.5

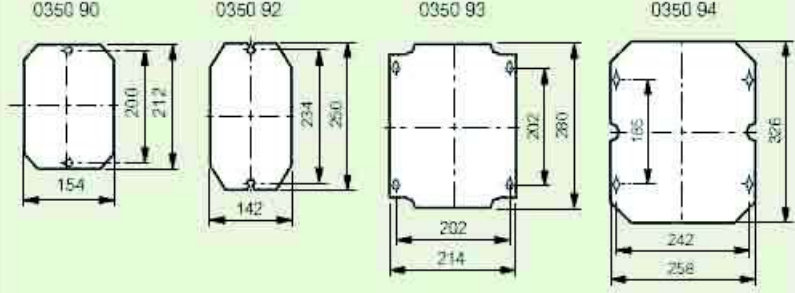
## Legrand industrial boxes - PVC range

■ Dimensions (mm)  
Cat. Nos. 0350 43/58



Cat. Nos.	Dimensions		Fixing points		Weight (kg)
	A (mm)	B (mm)	C (mm)	D (mm)	
0350 43	273	182	246	155	1.08
0350 58	367	273	340	246	1.80

■ Mounting plates for PVC boxes



0350 90: 154 x 212 (hole 200)  
0350 92: 142 x 250 (hole 234)  
0350 93: 202 x 280 (hole 202)  
0350 94: 242 x 326 (hole 185)

# T - BOX

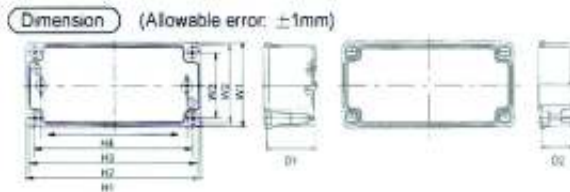


1. T - boxes are light in weight approximately 1/4 in weight of any metal boxes and can be easily install, drill and move. T - boxes are corrosion resistant and of good superior insulation.
2. T - boxes are weatherproof and dustproof under rigid quality standard of IP 66
3. T - boxes are easily ideal for the installation of terminal rail, relay, control components, electrical and communications sensors etc.

外觀尺寸 mm			ABS BOX		AC BOX	
長	寬	高	ABS盒蓋	PC透明盒蓋	Ac盒蓋	PC透明盒蓋
65	50	55	DS-AG-0506	DS-AT-0506	DS-PG-0506	DS-PT-0506
110	80	45	DS-AG-0811-S	DS-AT-0811-S	DS-PG-0811-S	DS-PT-0811-S
110	80	70	DS-AG-0811	DS-AT-0811	DS-PG-0811	DS-PT-0811
110	80	85	DS-AG-0811-1	DS-AT-0811-1	DS-PG-0811-1	DS-PT-0811-1
130	80	70	DS-AG-0813	DS-AT-0813	DS-PG-0813	DS-PT-0813
130	80	85	DS-AG-0813-1	DS-AT-0813-1	DS-PG-0813-1	DS-PT-0813-1
160	80	55	DS-AG-0816	DS-AT-0816	DS-PG-0816	DS-PT-0816
180	80	70	DS-AG-0818	DS-AT-0818	DS-PG-0818	DS-PT-0818
180	80	85	DS-AG-0818-1	DS-AT-0818-1	DS-PG-0818-1	DS-PT-0818-1
250	80	70	DS-AG-0825	DS-AT-0825	DS-PG-0825	DS-PT-0825
250	80	85	DS-AG-0825-1	DS-AT-0825-1	DS-PG-0825-1	DS-PT-0825-1
125	125	75	DS-AG-121-S	DS-AT-121-S	DS-PG-121-S	DS-PT-121-S
125	125	100	DS-AG-1212	DS-AT-1212	DS-PG-1212	DS-PT-1212
175	125	75	DS-AG-1217	DS-AT-1217	DS-PG-1217	DS-PT-1217
175	125	100	DS-AG-1217-1	DS-AT-1217-1	DS-PG-1217-1	DS-PT-1217-1
170	140	95	DS-AG-1417	DS-AT-1417	DS-PG-1417	DS-PT-1417
200	150	100	DS-AG-1520	DS-AT-1520	DS-PG-1520	DS-PT-1520
200	150	130	DS-AG-1520-1	DS-AT-1520-1	DS-PG-1520-1	DS-PT-1520-1
250	150	100	DS-AG-1525	DS-AT-1525	DS-PG-1525	DS-PT-1525
250	150	130	DS-AG-1525-1	DS-AT-1525-1	DS-PG-1525-1	DS-PT-1525-1
200	200	95	DS-AG-2020-S	DS-AT-2020-S	DS-PG-2020-S	DS-PT-2020-S
200	200	130	DS-AG-2020	DS-AT-2020	DS-PG-2020	DS-PT-2020

## BODY

## COVER



Model	H1	H2	H3	H4	W1	W2	W3	D1	D2
DS-0506	65	59	52	40	50	44	37	35	20
DS-0811-S	110	104	92	80	80	74	62	25	20
DS-0811	110	104	92	80	80	74	62	50	20
DS-0811-1	110	104	92	80	80	74	62	50	35
DS-0813	130	124	112	100	80	74	62	50	20
DS-0813-1	130	124	112	100	80	74	62	50	35
DS-0816	160	156	148	140	82	76	68	40	15
DS-0818	180	174	162	150	80	74	62	50	20
DS-0818-1	180	174	162	150	80	74	62	50	35
DS-0825	250	244	232	220	80	74	62	50	20
DS-0825-1	250	244	232	220	80	74	62	50	35
DS-1212-S	125	117	105	70	125	117	105	55	20
DS-1212	125	117	105	70	125	117	105	80	20
DS-1217	175	167	157	140	127	121	109	49	25
DS-1217-1	175	167	157	140	127	121	109	49	50
DS-1417	170	162	152	130	140	132	122	75	20
DS-1520	200	190	182	160	150	139	132	80	20
DS-1520-1	200	190	182	160	150	139	132	80	50
DS-1525	250	240	232	210	150	140	132	80	20
DS-1525-1	250	240	232	210	150	140	132	80	50
DS-2020-S	200	193	182	120	200	193	182	75	20
DS-2020	200	193	182	120	200	193	182	110	20



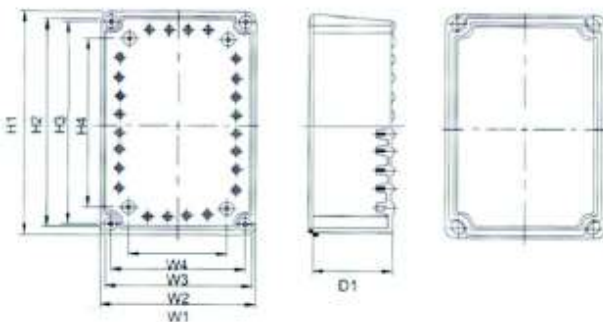
外觀尺寸 mm			ABS BOX		AC BOX	
長	寬	高	ABS盒蓋	PC透明盒蓋	ABS盒蓋	PC透明盒蓋
190	190	130	DS-AG-1919	DS-AT-1919	DS-PG-1919	DS-PT-1919
280	190	130	DS-AG-2819	DS-AT-2819	DS-PG-2819	DS-PT-2819
280	190	180	DS-AG-2819-1	DS-AT-2819-1	DS-PG-2819-1	DS-PT-2819-1
380	190	130	DS-AG-3819	DS-AT-3819	DS-PG-3819	DS-PT-3819
380	190	180	DS-AG-3819-1	DS-AT-3819-1	DS-PG-3819-1	DS-PT-3819-1
280	280	130	DS-AG-2828	DS-AT-2828	DS-PG-2828	DS-PT-2828
340	280	130	DS-AG-3428	DS-AT-3428	DS-PG-3428	DS-PT-3428
380	280	130	DS-AG-3828	DS-AT-3828	DS-PG-3828	DS-PT-3828
380	280	180	DS-AG-3828-1	DS-AT-3828-1	DS-PG-3828-1	DS-PT-3828-1
560	280	130	DS-AG-5628	DS-AT-5628	DS-PG-5628	DS-PT-5628
560	380	180	DS-AG-5638	DS-AT-5638	DS-PG-5638	DS-PT-5638

底板尺寸: mm

長	寬	高	鍍錳鋼板型號
161	161	1.2	MP-1919
251.5	161	1.2	MP-2819
352.5	161	1.2	MP-3819
251	251	1.2	MP-2828
312	251	1.2	MP-2834
351	251	1.2	MP-2838
532	254.5	1.2	MP-5628
532	345.5	1.2	MP-5638



Dimension (Allowable error : ± 1 mm)

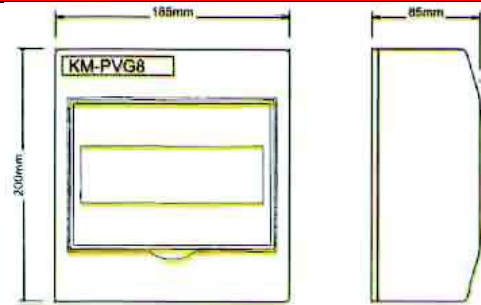


Model	Dimension				H1	H2	H3	H4	W1	W2	W3	W4	D1	D2
DS-1919	190	174	165	120	190	174	165	120	98	30				
DS-2819	280	266	255	210	190	170	165	120	98	30				
DS-2819-1	280	266	255	210	190	170	165	120	98	80				
DS-2828	280	260	255	210	280	260	255	210	98	30				
DS-2834	341	320	316	270	280	260	256	210	100	30				
DS-2838	380	359	355	310	280	259	254	210	98	30				
DS-2838-1	380	359	355	310	280	259	255	210	98	80				
DS-3819	382	366	355	310	192	172	165	120	98	30				
DS-3819-1	382	366	355	310	192	172	165	120	98	80				
DS-5628	560	540	535	490	280	260	255	220	98	30				
DS-5638	560	540	535	490	380	360	355	311	148	30				

## Distribution BOX - Polycarbonate Enclosures (Consumer Unit)

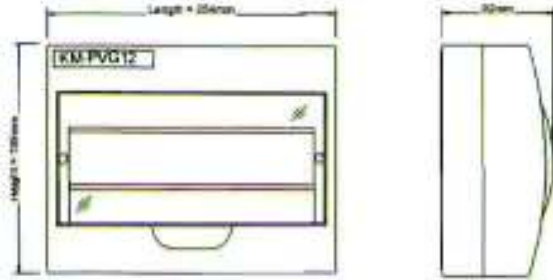
### PVG08

- Surface mounted enclosure
- 1 row, 8 modules each, fully insulated
- With din rail sections & PEN terminals
- Smoked transparent door
- Dimension: 85mm x 200mm x 85mm (WXHxD)



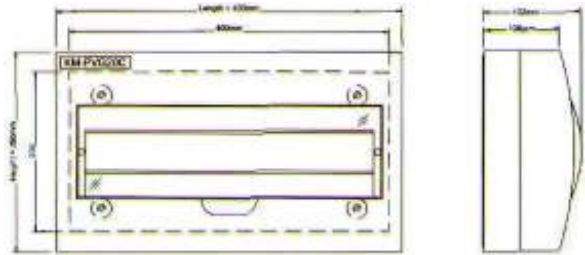
### PVG12

- Surface mounted enclosure
- 1 row, 12 modules each, fully insulated
- With din rail sections & PEN terminals
- Smoked transparent door
- Dimension: 254mm x 199mm x 92mm (WXHxD)



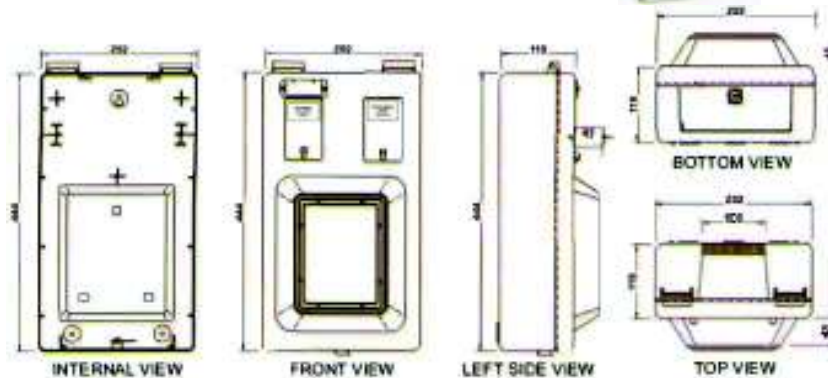
### PVG20C

- Surface mounted enclosure
- 1 row, 20 modules each, fully insulated
- With din rail sections & PEN terminals
- Smoked transparent door
- Dimension: 433mm x 250mm x 132mm (WXHxD)




### ST-EMB (Electrical Meter Box)

- Surface mounted enclosure
- With din rail sections
- Dimension: 252mm x 444mm x 119mm (WXHxD)



# TeSys D Contactors

Applications		All types of control system					
							
Rated operational current	Ie max AC-3 (I <sub>e</sub> ≤ 440 V) Ie AC-1 (I <sub>e</sub> ≤ 60 °C)	9 A 20/25 A	12 A	18 A 25/32 A	25 A 25/40 A	32 A 50 A	36 A
Rated operational voltage		690 V on ~ and =					
Number of poles		3 or 4	3 or 4	3 or 4	3 or 4	3	
Rated operational power in AC-3	220/240 V	2.2 kW	3 kW	4 kW	5.5 kW	7.5 kW	9 kW
	380/400 V	4 kW	5.5 kW	7.5 kW	11 kW	15 kW	18.5 kW
	415/440 V	4 kW	5.5 kW	9 kW	11 kW	15 kW	18.5 kW
	500 V	5.5 kW	7.5 kW	10 kW	15 kW	18.5 kW	18.5 kW
	660/690 V	5.5 kW	7.5 kW	10 kW	15 kW	18.5 kW	18.5 kW
	1000 V	–	–	–	–	–	–
Auxiliary contacts		1 N/C and 1 N/O instantaneous incorporated in the contactors, with add-on blocks common to the whole range comprising up to 4 N/C or N/O instantaneous, up to 1 N/O + 1 N/C time delay and up to 2 N/O or 2 N/C protected contacts and 2 screw continuity terminals.					
Thermal overload relays manual-auto compatible	Class 10 A	0.10...10 A	0.10...13 A	0.10...18 A	0.10...32 A	0.10...36 A	0.10...36 A
	Class 20	2.5...10 A	2.5...13 A	2.5...18 A	2.5...32 A		
Suppressor modules (= and low consumption contactors are fitted with a built-in bidirectional peak limiting diode suppressor as standard)	Varistor	•	•	•	•	•	•
	Diode	–	–	–	–	–	–
	RC circuit	•	•	•	•	•	•
	Bidirectional peak limiting diode	•	•	•	•	•	•
Interfaces	Relay output	•	•	•	•	•	•
	Relay interface with manual override switch	•	•	•	•	•	•
	Solid state	•	•	•	•	•	•
Contactor type references	~ or = 3 pole	LC1 D09	LC1 D12	LC1 D18	LC1 D25	LC1 D32	LC1 D36
	~ 4 pole	LC1 DT20/ LC1 D09B	LC1 DT25/ LC1 D12B	LC1 DT32/ LC1 D18B	LC1 DT40/ LC1 D25B	–	–
	= 4 pole	–	–	–	–	–	–
Reversing contactor type references	~ 3 pole	LC2 D09	LC2 D12	LC2 D18	LC2 D25	LC2 D32	LC2 D36
	= 3 pole	LC2 D09	LC2 D12	LC2 D18	LC2 D25	LC2 D32	LC2 D36
	~ 4 pole	LC2 DT20	LC2 DT25	LC2 DT32	LC2 DT40	–	–
	= 4 pole	LC2 DT20	LC2 DT25	LC2 DT32	LC2 DT40	–	–
Pages	Contactors	24501/2 to 24502/5					
	Reversing contactors	24503/2 to 24510/3					

								
<b>Rated operational current</b>	6 max AC (1.5s-1.4kV) 6 AC (1 min @ 70°C)	40A 60A	60A 60A	60A 60A	60A 120A	120A 200A	200A	
<b>Rated operational voltage</b>		600V AC □			1000V AC □ supply, 600V AC □ supply			
<b>Number of poles</b>		3	4	3	4	3	4	3
<b>Rated operational power</b>	27000V 30000V 41000V 50V 60000V 600V	11.6W 18.5W 22W 22W 30W	19W 22W 25.9W 26W	11.5W 21W 27W 27W	22W 27W 28W 28W	25.6W 28W 28W 28W	30.4W 32.8W 34.8W 35.2W 43W	40.6W 75.6W 80.6W 80.6W 128W 90.6W
<b>Auxiliary contacts</b>		1 NO and 1 NO instantaneous incorporated in the contactor, with add-on block contact in the whole range comprising up to 4 NO or NO instantaneous, up to 1 NO + 1 NO time-delay and up to 2 NO or 2 NO protected contacts and 2 screw continuity terminals						
<b>Thermal overload relays</b>	Class 30A	11_40A	11_60A	11_60A	17_100A	17_100A	60_180A	60_180A
<b>Thermal overload relays</b>	standard with compatible	11_40A	11_60A	11_60A	17_100A	17_100A	60_180A	60_180A
<b>Suppression modules</b>	status	+	+	+	+	+	+	+
<b>Suppression modules</b>	□ and its combination	+	+	+	+	+	+	+
<b>Suppression modules</b>	contactors are fitted with a built-in bidirectional peak holding diode suppression as standard	+	+	+	+	+	+	+
<b>Interfaces</b>	Relay output	+	+	+	+	+	+	+
<b>Interfaces</b>	Relay interface with manual override switch	+	+	+	+	+	+	+
<b>Interfaces</b>	Sub-cable	+	+	+	+	+	+	+
<b>Contact type references</b>	□ 3 pole	LC1 D40A	LC1 D60A	LC1 D60A	LC1 D60A	LC1 D60A	LC1 D110	LC1 D180
<b>Contact type references</b>	□ 4 pole	LC1 D70A	-	LC1 D70A	LC1 D60A	-	LC1 D110	-
<b>Contact type references</b>	□ 6 pole	LC1 D70A	-	LC1 D70A	LC1 D60A	-	LC1 D110	-
<b>Reversing contactors type references</b>	□ 3 pole	LC2 D40A	LC2 D60A	LC2 D60A	LC2 D60A	LC2 D60A	LC2 D110	LC2 D180
<b>Reversing contactors type references</b>	□ 2 pole	LC2 D40A	LC2 D60A	LC2 D60A	-	-	-	-
<b>Reversing contactors type references</b>	□ 4 pole	-	-	-	LC2 D60A	-	LC2 D110	-
<b>Reversing contactors type references</b>	□ 6 pole	-	-	-	-	-	-	-
<b>Pages</b>	Contacts	245112 to 245115						
<b>Pages</b>	Reversing contactors	245112 to 245115						

# TeSys D, 3-pole thermal overload relays



LRD 01



LRD 30



LRD 32



LRD 34

## 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. or d.c.

Relay setting range (A)	Fuses to be used with selected relay			For use with contactor LC1	Reference	Weight kg
	aM (A)	gG (A)	BS88 (A)			
<b>Class 10 A (1) for connection by screw clamp terminals or connectors</b>						
0.10...0.16	0.25	2	—	D09...D38	LRD 01	0.124
0.16...0.25	0.5	2	—	D09...D38	LRD 02	0.124
0.25...0.40	1	2	—	D09...D38	LRD 03	0.124
0.40...0.63	1	2	—	D09...D38	LRD 04	0.124
0.63...1	2	4	—	D09...D38	LRD 05	0.124
1...1.6	2	4	6	D09...D38	LRD 06	0.124
1.6...2.5	4	6	10	D09...D38	LRD 07	0.124
2.5...4	6	10	16	D09...D38	LRD 08	0.124
4...6	8	16	16	D09...D38	LRD 10	0.124
5.5...8	12	20	20	D09...D38	LRD 12	0.124
7...10	12	20	20	D09...D38	LRD 14	0.124
9...13	16	25	25	D12...D38	LRD 16	0.124
12...18	20	35	32	D18...D38	LRD 21	0.124
16...24	25	50	50	D25...D38	LRD 22	0.124
23...32	40	63	63	D25...D38	LRD 32	0.124
30...38	40	80	80	D32 and D38	LRD 35	0.124
<b>Class 10 A (1) for connection by EverLink® BTR screw connectors (3)</b>						
9...13	16	25	25	D40A...D65A	LRD 313	0.375
12...18	20	32	35	D40A...D65A	LRD 318	0.375
17...25	25	50	50	D40A...D65A	LRD 325	0.375
23...32	40	63	63	D40A...D65A	LRD 332	0.375
30...40	40	80	80	D40A...D65A	LRD 340	0.375
37...50	63	100	100	D40A...D65A	LRD 350	0.375
48...65	63	100	100	D50A and D65A	LRD 365	0.375
<b>Class 10 A (1) for connection by screw clamp terminals or connectors</b>						
17...25	25	50	50	D80 and D95	LRD 3322	0.510
23...32	40	63	63	D80 and D95	LRD 3353	0.510
30...40	40	100	80	D80 and D95	LRD 3355	0.510
37...50	63	100	100	D80 and D95	LRD 3357	0.510
48...65	63	100	100	D90 and D95	LRD 3359	0.510
55...70	80	125	125	D80 and D95	LRD 3361	0.510
63...80	80	125	125	D90 and D95	LRD 3363	0.510
80...104	100	160	160	D80 and D95	LRD 3365	0.510
80...104	125	200	160	D115 and D150	LRD 4365	0.900
95...120	125	200	200	D115 and D150	LRD 4367	0.900
110...140	160	250	200	D150	LRD 4369	0.900
80...104	100	160	160	(2)	LRD 3365#	1.000
95...120	125	200	200	(2)	LRD 3367#	1.000
110...140	160	250	200	(2)	LRD 3369#	1.000

### Class 10 A (1) for connection by lugs

Select the appropriate overload relay with screw clamp terminals or connectors from the table above and add one of the following suffixes:

- figure 6 for relays LRD 01 to LRD 35 and relays LRD 313 to LRD 365.
- A66 for relays LRD 3322 to LRD 3365.

Relays LRD 43## are suitable, as standard, for use with lug-clamps.

## Thermal overload relays for use with unbalanced loads

### Class 10 A (1) for connection by screw clamp terminals or lugs

In the references selected above, change the prefix LRD (except LRD 4###) to LR3 D.

Example: LRD 01 becomes LR3 D01.

Example with EverLink® connectors: LRD 340 becomes LR3 D340.

Example with lugs: LRD 3406 becomes LR3 D3406.

(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

(2) Independent mounting of the contactor.

(3) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used



LRD ■■3

### 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. or d.c.

Relay setting range (A)	Fuses to be used with selected relay			For use with contactor LC1	Reference	Weight kg
	eM (A)	gG (A)	BS88 (A)			
<b>Classes 10 A (1) for connection by spring terminals (only for direct mounting beneath the contactor)</b>						
0.10...0.16	0.25	2	–	D09...D38	LRD 013	0.140
0.16...0.25	0.5	2	–	D09...D38	LRD 023	0.140
0.25...0.40	1	2	–	D09...D38	LRD 033	0.140
0.40...0.63	1	2	–	D09...D38	LRD 043	0.140
0.63...1	2	4	–	D09...D38	LRD 053	0.140
1...1.6	2	4	6	D09...D38	LRD 063	0.140
1.6...2.5	4	6	10	D09...D38	LRD 073	0.140
2.5...4	6	10	16	D09...D38	LRD 083	0.140
4...6	8	16	16	D09...D38	LRD 103	0.140
5.5...8	12	20	20	D09...D38	LRD 123	0.140
7...10	12	20	20	D09...D38	LRD 143	0.140
9...13	16	25	25	D12...D38	LRD 163	0.140
12...18	20	35	32	D18...D38	LRD 213	0.140
16...24	25	50	50	D25...D38	LRD 223	0.140

### Class 10 A with connection by EverLink® BTR screw connectors (2) and control by spring terminals

9...13	16	25	25	D40A...D65A	LRD 3133	0.375
12...18	20	32	35	D40A...D65A	LRD 3183	0.375
17...25	25	50	50	D40A...D65A	LRD 3253	0.375
23...32	40	63	63	D40A...D65A	LRD 3323	0.375
30...40	40	80	80	D40A...D65A	LRD 3403	0.375
37...50	63	100	100	D40A...D65A	LRD 3503	0.375
48...65	63	100	100	D50A and D65A	LRD 3653	0.375

### Thermal overload relays for use with unbalanced loads

Classes 10 A (1) for connection by BTR screw connectors (2) and control by spring terminals

In the references selected above, replace LRD 3 with LR3 D3.

Example: LRD 3653 becomes LR3 D3653.

### Thermal overload relays for use on 1000 V supplies

Classes 10 A (1) for connection by screw clamp terminals

For relays LRD 06 to LRD 35 only, for an operating voltage of 1000 V, and only for independent mounting, the reference becomes LRD 33■■A66.

Example: LRD 12 becomes LRD 3312A66.

Order an LA7 D3064 terminal block separately, see page 24515/3.

(1) Standard IEC 60947-4-1 specifies a tripping time for 7.2 times the setting current  $I_{se}$  class 10 A, between 2 and 10 seconds.

(2) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LAD ALLEN, see page 24511/9).



LRD 15\*\*



LRD 3\*\*L



LR2 D35\*\*

## 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. or d.c.

Relay setting range (A)	Fuses to be used with selected relay			For use with contactor LC1	Reference	Weight kg
	aM (A)	gG (A)	BS88 (A)			
<b>Classes 20 (1) for connection by screw clamp terminals</b>						
2.5...4	6	10	15	D09...D32	LRD 1508	0.190
4...6	8	16	15	D09...D32	LRD 1510	0.190
6.5...8	12	20	20	D09...D32	LRD 1512	0.190
7...10	16	20	25	D09...D32	LRD 1514	0.190
9...13	16	25	25	D12...D32	LRD 1516	0.190
12...18	25	35	40	D18...D32	LRD 1521	0.190
17...25	32	60	50	D25 and D32	LRD 1522	0.190
23...28	40	63	63	D25 and D32	LRD 1530	0.190
25...32	40	63	63	D25 and D32	LRD 1532	0.190

<b>Class 20 (1) for connection by EverLink® BTR screw connectors (2)</b>						
9...13	20	32	35	D40A...D65A	LRD 313L	0.375
12...18	25	40	40	D40A...D65A	LRD 318L	0.375
17...25	32	60	50	D40A...D65A	LRD 325L	0.375
25...32	40	63	63	D40A...D65A	LRD 332L	0.375
30...40	50	80	80	D40A...D65A	LRD 340L	0.375
37...50	63	100	100	D40A...D65A	LRD 350L	0.375
48...65	80	125	125	D50A and D65A	LRD 365L	0.375

<b>Classes 20 (1) for connection by screw clamp terminals</b>						
17...25	32	50	50	D80 and D95	LR2 D3522	0.535
23...32	40	63	63	D80 and D95	LR2 D3553	0.535
30...40	40	100	80	D80 and D95	LR2 D3555	0.535
37...50	63	100	100	D80 and D95	LR2 D3557	0.535
48...65	80	125	100	D80 and D95	LR2 D3559	0.535
65...70	100	125	125	D80 and D95	LR2 D3561	0.535
63...80	100	160	125	D80 and D95	LR2 D3563	0.535

(1) Standard IEC 60947-4-1 specifies a tripping time for 7.2 times the setting current  $I_n$  class 20 between 6 and 20 seconds

(2) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LAD ALLEN4, see page 24511/9)

### Differential thermal overload relays

for use with fuses or magnetic circuit-breakers NSX

- Compensated relays, with relay trip indicator,
- for a.c.,
- for direct mounting on contactor or independent mounting(1).

Relay setting range (A)	Fuses to be used with selected relay		For mounting beneath contactor LC1	Reference	Weight kg
	aM (A)	gG (A)			
<b>Classes 10 or 10A (2) for connection using bars or connectors</b>					
60...100	100	160	D115 and D150	LR9 D5367	0.885
90...150	160	250	D115 and D150	LR9 D5368	0.885
<b>Classes 20 (2) for connection using bars or connectors</b>					
60...100	125	160	D115 and D150	LR9 D5567	0.885
90...150	200	250	D115 and D150	LR9 D5569	0.885

### Electronic thermal overload relays for use with balanced or unbalanced loads

- Compensated relays,
- with separate outputs for alarm and tripping.

Relay setting range (A)	Fuses to be used with selected relay		For mounting beneath contactor LC1	Reference	Weight kg
	aM (A)	gG (A)			
<b>Classes 10 or 20 (2) selectable, for connection using bars or connectors</b>					
60...100	100	160	D115 and D150	LR9 D67	0.900
90...150	160	250	D115 and D150	LR9 D69	0.900

(1) Power terminals can be protected against direct finger contact by the addition of shrouds and/or insulated terminal blocks, to be ordered separately (see page 24511/8).

(2) Standard IEC 60947-4-1 specifies a tripping time for 7.2 times the setting current  $I_n$ :  
class 10: between 4 and 10 seconds  
class 10 A: between 2 and 10 seconds  
class 20 A: between 6 and 20 seconds

#### Other versions

Thermal overload relays for resistive circuits in category AC-1.  
Please consult your Regional Sales Office.

## TeSys enclosed starters

Equipment for control in utilization category AC-1(1) (2), without isolating device



LE1 D123



LE1 D405

### References

Operational current up to	Minimum c.s.a. of phase conductors	Fuses to be fitted separately		For use with relay LR2 D or kit LA9 D (to be ordered separately)	Basic reference, to be completed by adding the voltage code (3)	Weight
		aM	gG			
A	mm <sup>2</sup>	A	A			kg
16	2.5	–	16	LA9 D1275 (4)	LE1 D123**	0.920
17.5	1.5	20	–	LR2 D1321 (2)	LE1 D123**	0.920
24	2.5	25	–	LR2 D1322 (2)	LE1 D255**	1.015
32	6	–	32	LA9 D0975 (4)	LE1 D255**	1.015
50	10	–	50	–	LE1 D405**A04 (5)	4.820
57	10	63	–	LR2 D3359 (2)	LE1 D405**	4.820
63	16	–	63	–	LE1 D455**A04 (5)	4.850
76	16	80	–	LR2 D3363 (2)	LE1 D455**	4.850
90	25	100	–	LR2 D3365 (2)	LE1 D805**	5.140
100	35	–	100	–	LE1 D805**A04 (5)	5.140

### Specifications

Enclosure	LE1 D12	Double insulated, degree of protection IP 659
	LE1 D25	Double insulated, degree of protection IP 657
	LE1 D40...D80	Metal, degree of protection IP 559
Control (2 pushbuttons mounted on enclosure cover)	LE1 D12...D80	1 green Start button 'I' 1 red Stop/Reset button 'O'
No pushbuttons on cover	LE1 D*****A04	
Connections	LE1 D12...D80	Pre-wired control circuit connectors

(1) 3-phase 220/230 V, 240 V, 380/400 V or 415 V 50/60 Hz, 3-core or 3 Ph + N (unprotected neutral) insulated PVC cable, fixed to walls, ceilings, in cable racks or ducting, laid singly, ambient temperature ≤ 35 °C, conforming to NF C 15-100.

(2) Order the required LR2 D thermal overload relay separately, for use on balanced circuits only.

(3) Control circuit voltage 50/60 Hz 220/230 V (code M7) or 380/400 V (code Q7).

(4) As protection is provided by type gG fuses only, the Stop function normally provided by the thermal overload relay (where aM type fuses are used) can be obtained by means of kit LA9 D\*\*75.

(5) Equipment supplied without pushbuttons; external Start-Stop station required.

### Variants (pre-assembled)

Description	Application	Suffix to be added to the starter reference (3)
No pushbuttons on cover	LE1 D12 and D25	A04
1 blue Reset button "R"	LE1 D12...D80	A05
1 green Start button "T" and 1 red Stop button "O" with 1 N/C contact (for distribution circuits without thermal overload relay)	LE1 D12 and D25	A07
1 2-position selector switch "O-T" ("O": Stop; "T": Manual Start) 1 blue Reset button "R"	LE1 D12	A13
Knock-outs for 4 x 16 mm plastic cable glands (instead of 4 x 13 mm plastic glands)	LE1 D12	A20
1 neutral terminal (for 3-phase + N circuits)	LE1 D12...D80	A50

### Accessories (for customer assembly)

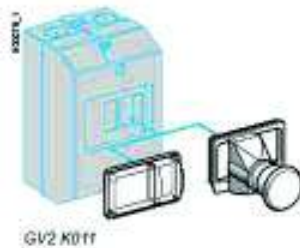
Description	For use on	Reference	Weight kg	
Start pushbutton latching device for stay put operation (Start-Stop)	LE1 D25...D65	LA9 00907	0.060	
Kits to provide Stop function without thermal overload relay fitted	LE1 D12	LA9 D1275	0.040	
	LE1 D25	LA9 D0975	0.020	
Miniature control circuit fuse holder size 5 x 20, 4 A/250 V Fuse supplied	LE1 D12	LA9 D931	0.040	
	LE1 D25	LA9 D941	0.025	
Pilot light with neon bulb, red lens and locking ring	110 V	LE1 D12 and D25	LA9 D924	0.020
	220 V	LE1 D12 and D25	LA9 D925	0.020
	380, 415 V	LE1 D12 and D25	LA9 D926	0.020
1 front-mounting block of 2 auxiliary contacts, please consult your Regional Sales Office	LE1 D12...D80	LA1 DN**	0.030	

(1) 3-phase 220/230 V or 380/400 V 50/60 Hz, 3-core or 3-Ph + N (unprotected neutral) insulated PVC cable, fixed to walls, ceilings, in cable racks or ducting, laid singly; ambient temperature  $\leq 35$  °C, conforming to NF C 15-100.  
 (2) Order the required LR2 D thermal overload relay separately, for use on balanced circuits only.  
 Example: LE1 D12M7A04

### Other versions

Possible combinations of 2 variants.

## Enclosed thermal-magnetic motor circuit-breakers GV2 ME and accessories, for customer assembly



### References

#### Thermal-magnetic motor circuit-breakers GV2 ME

For motor circuit-breakers and accessories: see pages 24508/3, 24512/3 and 24512/11.

Starters consisting of a GV2 ME motor circuit-breaker in an enclosure conform to standard IEC 60947-4-1.

GV2	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 10	ME 14	ME 16	ME 20	ME 21	ME 22
Ithe in enclosure (A)	0.16	0.25	0.4	0.63	1	1.6	2.5	4	6.3	9	13	17	21	23

#### Enclosures for thermal-magnetic circuit-breakers GV2 ME

Type	Degree of protection	Possible no. of side mounting auxiliary contact blocks on GV2 ME		Reference	Weight kg
		LH side	RH side		
Surface mounting, double insulated with protective conductor Sealable cover	IP 41	1	1	GV2 MC01	0.290
	IP 55	1	1	GV2 MC02	0.300
				or GV2 MCK04 (1)	0.420
	IP 55 for temperature < +5 °C	1	1	GV2 MC03	0.300
Flush mounting with protective conductor	IP 41 (front face)	1	1	GV2 MP01	0.115
	IP 41 (reduced flush mounting)	–	1	GV2 MP03	0.115
	IP 55 (front face)	1	1	GV2 MP02	0.130
	IP 55 (reduced flush mounting)	–	1	GV2 MP04	0.130

#### Front plate

Description		Reference	Weight kg
For direct control, through a panel, of a chassis mounted GV2 ME	IP 55	GV2 CP21	0.800

#### Accessories common to all enclosures (to be ordered separately)

Description		Sold in lots of	Unit reference	Weight kg	
Padlocking device (2) for GV2 ME operator (padlocking is only possible in the "O" position)	1 to 3 padlocks Ø 4 to 8 mm	1	GV2 V01	0.075	
Mushroom head Emergency stop pushbutton Ø 40 mm, red	Spring return (2)	1	GV2 K011	0.052	
	Latching (2)	Key release, key n° 455	1	GV2 K021	0.160
	IP 55	Turn to release	1	GV2 K031	0.115
		1	GV2 K04 (3)	0.120	
Sealing kit	For enclosures and front plate	IP 55 for temperature between +5 °C and +40 °C	10	GV2 E01	0.012
		IP 55 for temperature between -20 °C and +40 °C	10	GV2 E02	0.012
Neutral terminal		100	AB1 VV635UBL	0.015	
Partition		50	AB1 AC6BL	0.003	

(1) Enclosure GV2 MCK04 is fitted with a GV2 K04 mushroom head Emergency stop pushbutton as standard.

(2) Supplied with IP 55 sealing kit. To be fitted with enclosure GV2 M#01.

(3) Padlockable in "O" position using Ø 4 to 8 mm shank padlocks.

## References (continued)

### Thermal-magnetic motor circuit-breakers GV3 P

For motor circuit-breakers and accessories: see pages 24508/4 and 24512/5.  
GV3 P40: operational current in enclosure limited to 30 A.  
Starters consisting of a GV3 P motor circuit-breaker in an enclosure conform to standards IEC/EN 60947-4-1 and IEC/EN 60947-2.

### Metal enclosures fitted with a padlockable rotary handle (1), for thermal-magnetic circuit-breakers GV3 P, up to 30 A

Composition (2)	Type	Degree of protection of enclosure	Reference	Weight kg
■ Metal enclosure. ■ Black handle LUG AP11 ■ Padlocking in ON/OFF position ■ Circuit-breaker/handle adapter	Surface mounting	IP 55 IK 09	GV3 PC01	2,000
■ Metal enclosure. ■ Red handle LUG AP12 ■ Padlocking in OFF position ■ Circuit-breaker/handle adapter	Surface mounting	IP 55 IK 09	GV3 PC02	2,000

(1) For special applications a GV3 L magnetic motor circuit-breaker can be fitted in this type of enclosure. Please consult your Regional Sales Office.

(2) Components for customer assembly. Circuit-breaker to be ordered separately.

## Dimensions

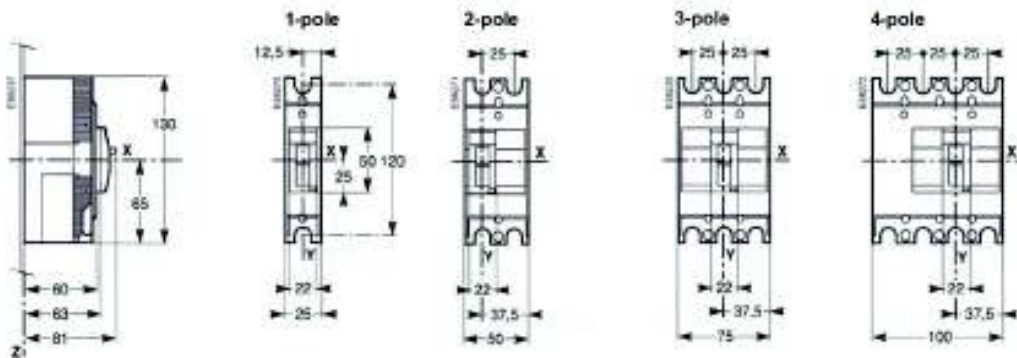


# MCCB - Circuit Breaker



Designation		Cat. number	
Auxiliary Switch (AX)		EZAUX10	
Alarm Switch (AL)		EZAUX01	
Aux. Switch (Alarm Switch) (AXIAL)		EZAUX11	
Shunt trip (SHT)	100-130 V AC	EZASHT100AC	
	200-277 V AC	EZASHT200AC	
	380-480 V AC	EZASHT380AC	
	24 V DC	EZASHT024DC	
	48 V DC	EZASHT048DC	
Under Voltage Release (UVR)	110-130 V AC	EZAUVR110AC	
	200-240 V AC	EZAUVR200AC	
	277 V AC	EZAUVR277AC	
	380-415 V AC	EZAUVR380AC	
	440-480 V AC	EZAUVR440AC	
	24 V DC	EZAUVR024DC	
	48 V AC	EZAUVR048DC	

## Dimensions



**EZC100B 15 to 60 A [Icu = 10kA @240V, 7.5kA @400V]**

Rating	Cat. Nb 3-pole
15 A	EZC100B3015
20 A	EZC100B3020
25 A	EZC100B3025
30 A	EZC100B3030
40 A	EZC100B3040
50 A	EZC100B3050
60 A	EZC100B3060

**EZC100F 15 to 100 A [Icu= 25kA @ 240V, 10kA @ 400V]**

Rating	Cat. Nb 3-pole
15 A	EZC100F3015
20 A	EZC100F3020
25 A	EZC100F3025
30 A	EZC100F3030
40 A	EZC100F3040
50 A	EZC100F3050
60 A	EZC100F3060
75 A	EZC100F3075
80 A	EZC100F3080
100 A	EZC100F3100

**EZC100N 15 to 100 A [Icu = 25kA @ 240V, 15kA @400V]**

Rating	Cat. Nb 1-pole	Cat. Nb 3-pole	Cat. Nb 4-pole
15 A	EZC100N1015	EZC100N3015	EZC100N4015
20 A	EZC100N1020	EZC100N3020	EZC100N4020
25 A	EZC100N1025	EZC100N3025	EZC100N4025
30 A	EZC100N1030	EZC100N3030	EZC100N4030
40 A	EZC100N1040	EZC100N3040	EZC100N4040
50 A	EZC100N1050	EZC100N3050	EZC100N4050
60 A	EZC100N1060	EZC100N3060	EZC100N4060
75 A	EZC100N1075	EZC100N3075	EZC100N4075
80 A	EZC100N1080	EZC100N3080	EZC100N4080
100 A	EZC100N1100	EZC100N3100	EZC100N4100

**EZC100H 15 to 100 A [Icu = 50kA @ 240V, 30kA @ 400V]**

Rating	Cat. Nb 1-pole	Cat. Nb 2-pole	Cat. Nb 3-pole	Cat. Nb 4-pole
15 A	EZC100H1015	EZC100H2015	EZC100H3015	EZC100H4015
20 A	EZC100H1020	EZC100H2020	EZC100H3020	EZC100H4020
25 A	EZC100H1025	EZC100H2025	EZC100H3025	EZC100H4025
30 A	EZC100H1030	EZC100H2030	EZC100H3030	EZC100H4030
40 A	EZC100H1040	EZC100H2040	EZC100H3040	EZC100H4040
50 A	EZC100H1050	EZC100H2050	EZC100H3050	EZC100H4050
60 A	EZC100H1060	EZC100H2060	EZC100H3060	EZC100H4060
75 A	EZC100H1075	EZC100H2075	EZC100H3075	EZC100H4075
80 A	EZC100H1080	EZC100H2080	EZC100H3080	EZC100H4080
100 A	EZC100H1100	EZC100H2100	EZC100H3100	EZC100H4100