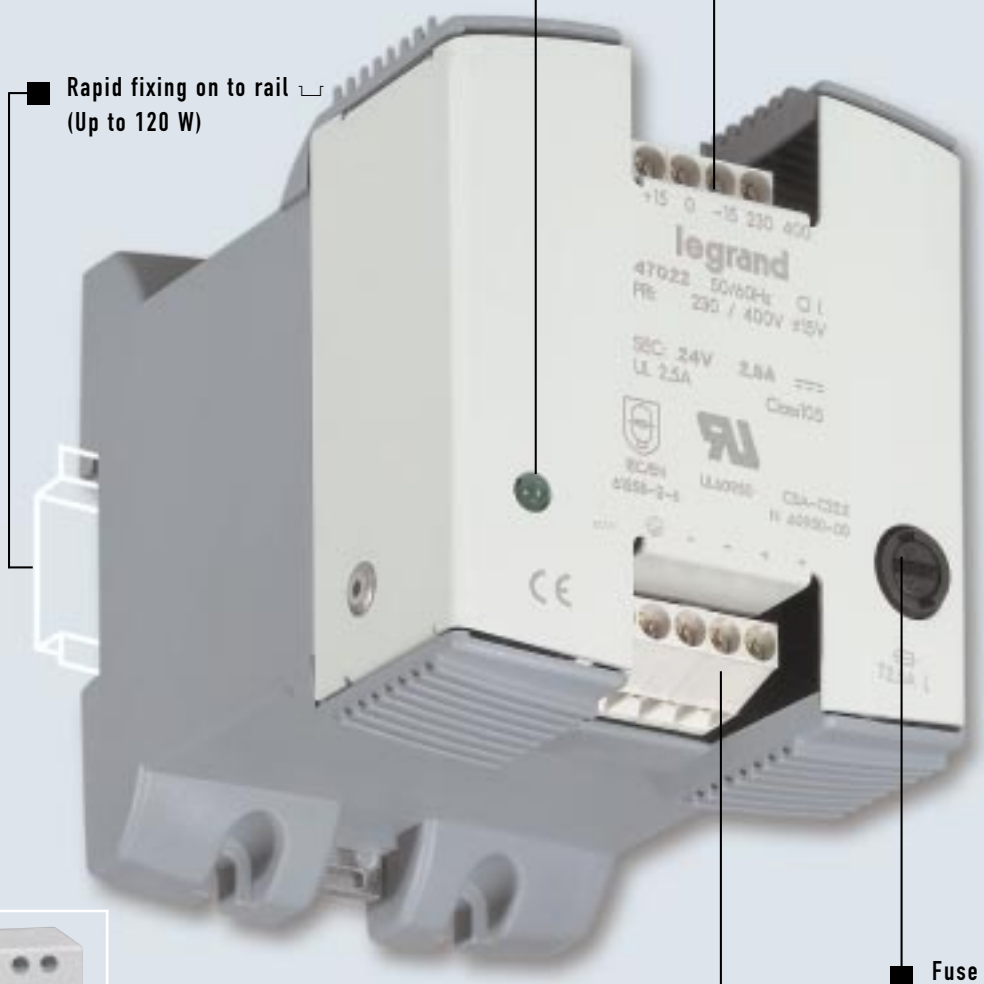
Filtered and non-filtered power supplies

Legrand's new filtered and non-filtered power supplies offer the same space saving benefits as the other ranges... and just like them, they are quick to install and are laser engraved for clear and permanent identification.





Modular filtered version also available

filtered and non-filtered power supplies
single phase


0470 53


0470 24


0047 98

Technical information (opposite and p. 17-18)

Filtered power supplies for PLCs and other equipment requiring a voltage of 12 V DC or 24 V DC
Non-filtered power supplies for installations requiring a 24 V DC voltage

Include :
- twin output terminals for ease of connection
- safety transformer with electrostatic screen except Cat. Nos. marked(1)
- fuse protection on output (except modular)
- green LED output voltage indicator
- capacitor in filtered range
- PTC thermal protection on output (modular only)
- class II when installed with approved protection (modular only)

Supplied with a connection link for quick connection between - and ⏚ up to 15 A (except modular)

Single phase filtered

12 V⎓ output
230-400 V ± 15 V∿ (input) / 12 V⎓ (output)

Pack	Cat. Nos. Input 230-400 V	Power (W)	Current rating (A)	Terminal capacity (mm²) Flexible cable Input	Output
1	0470 01(1)	12	1	6	6
1	0470 02(1)	30	2·5	6	6
1	0470 03	60	5	6	6
1	0470 04	120	10	6	6

24 V⎓ output
230-400 V ± 15 V∿ (input) / 24 V⎓ (output)

Pack	Cat. Nos. Input 230-400 V	Power (W)	Current rating (A)	Terminal capacity (mm²) Flexible cable Input	Output
1	0470 20(1)	12	0·5	6	6
1	0470 21(1)	24	1	6	6
1	0470 22(1)	60	2·5	6	6
1	0470 23	120	5	6	6
1	0470 24	240	10	6	6
1	0470 25	360	15	6	6

Single phase non-filtered

24 V⎓ output
230-400 V∿ ± 15 V (input)
24 V⎓ (output)

Pack	Cat. Nos. Input 230-400 V	Power (W)	Current rating (A)	Terminal capacity (mm²) Flexible cable Input	Output
1	0470 51(1)	24	1	6	6
1	0470 52(1)	60	2·5	6	6
1	0470 53	120	5	6	6
1	0470 54	240	10	6	6
1	0470 55	360	15	6	6

Single phase filtered modular

12 V⎓ output
230 ± 15 V∿ (input) / 12 V⎓ (output)

Pack	Cat. Nos. Input 230 V	Power (W)	Current rating (A)	Terminal capacity (mm²) Flexible cable Input	Output
1	0047 95	15	1·25	6	6

24 V⎓ output
230 ± 15 V∿ (input) / 24 V⎓ (output)

Pack	Cat. Nos. Input 230 V	Power (W)	Current rating (A)	Terminal capacity (mm²) Flexible cable Input	Output
1	0047 97(1)	12	0·5	6	6
1	0047 98	21·5	0·9	6	6

(1) Without screen, separation and attenuation by dividing flange between windings

filtered and non-filtered power supplies
single phase

■ Technical information (additional information p. 17-18)

Cat. Nos. 0470 01/02/03/04/20/21/22/23/24/25/51/52/53/54 and 55

Conform to IEC/EN 61558-2-6
UL 60950 (up to 10 A)
CAN/CSA C22.22 N° 60 950.00

Filtered products are compatible with EN 61131-2, EN 60204 and EN 60439-1 apparatus

Cat. Nos. 0047 95/97 and 98

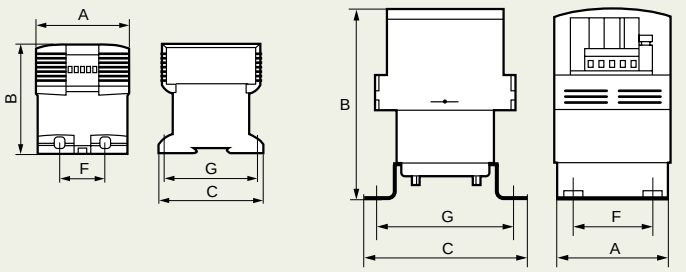
Conform to IEC/EN 61558-2-6

Products are compatible with EN 61131-2, EN 60204 and EN 60439-1 apparatus

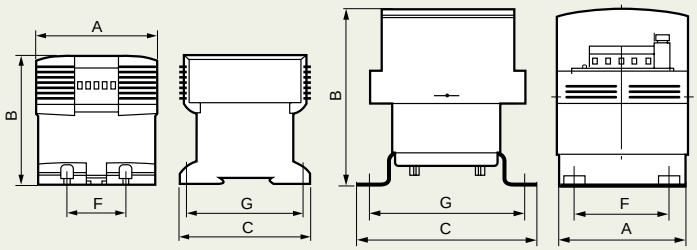
■ Dimensions

Cat. Nos.	A (mm) Width	B (mm) Depth	C (mm) Height	F x G (mm) Fixing ctrs	Ø (mm)	Weight (Kg)
0470 01	68	98	88	DIN	–	1·00
0470 02	93	121	105	45 x 94	4·6	2·45
0470 03	105	135	115	45 x 104	4·6	3·60
0470 04	126	186	175	75 x 150	5·5	6·35
0470 20	68	98	88	DIN	–	1·00
0470 21	68	98	88	DIN	–	1·00
0470 22	93	121	105	45 x 94	4·6	2·45
0470 23	105	135	115	45 x 104	4·6	3·60
0470 24	126	186	175	75 x 150	5·5	6·35
0470 25	126	206	175	75 x 150	5·5	7·60
0470 51	68	98	88	DIN	–	1·00
0470 52	93	106	105	45 x 94	4·6	1·70
0470 53	105	135	115	45 x 104	4·6	3·40
0470 54	126	186	175	75 x 150	5·5	6·10
0470 55	126	206	175	75 x 150	5·5	7·30
0047 95	89	66	95	DIN	–	1·00
0047 97	89	66	95	DIN	–	1·00
0047 98	89	66	95	DIN	–	1·00

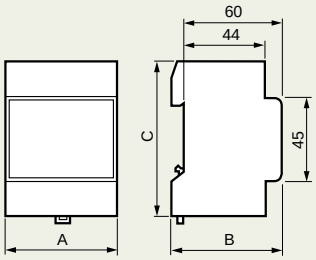
Single phase filtered



Single phase non-filtered



Single phase linear modular



filtered power supplies
open type single phase

■ Cat. Nos. 0470 01/02/03/04/20/21/22/23/24 and 25

Conform to IEC/EN 61558-2-6
UL 60950 (up to 10 A)
CAN/CSA C22.22 N° 60 950.00

Products are compatible with EN 61131-2, EN 60204 and EN 60439-1 apparatus

Input voltage : 230/400 V~ ±15 V single phase 50/60 Hz - Class I
Output voltage : 12 V⎓ or 24 V⎓
Insulation voltage : Input/Output 4 510 V
Input/Earth 2 260 V
Output/Earth 500 V
Max. ambient temperature without derating : 60 °C
Ripple factor : <3 % filtered
Cooling by natural convection
Integral fuse protection on output
All except Cat. Nos. 0470 04/24 and 25 can be fixed to symmetrical rail ⊔ 7·5 mm or 15 mm depth EN 50022
Screw fix only Cat. Nos. 0470 04/24 and 25
Screw fix or clip on to DIN rail Cat. Nos. 0470 02/03/04,22 and 23
Supplied with a connection link for quick connection between terminals and earth up to 15 A

■ Cat. Nos. 0047 95/97 and 98

Conform to IEC/EN 61558-2-6

Products are compatible with EN 61131-2, EN 60204 and EN 60439-1 apparatus

Input voltage : 230 V~ ±15 V single phase 50/60 Hz
Output voltage : 12 V⎓ or 24 V⎓
Ripple factor : <5 %
PTC thermal protection on output
Insulation : Class II after enclosing behind insulated modular protection
Fix to symmetrical rail ⊔ 7·5 mm or 15 mm depth EN 50022
(5 x 17·5 mm modules)

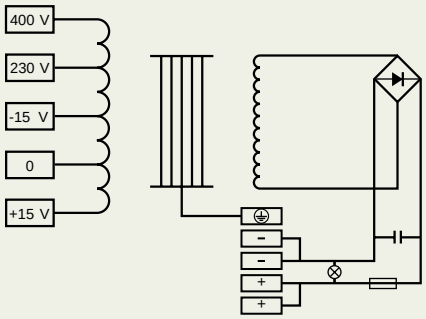
■ Circuit protection (double pole MCB)

Single phase		Input 230/400 V ±15 V			
U / P	Protection	12 V		24 V	
		Internal	External	Internal	External
0·5 A	Power supply			0470 20	
	MCB/Fuse			T 0·5 A L(1)	0069 12 (1 A)
	Power supply			0047 97(2)	
	MCB/Fuse			CTP	0069 12 (1 A)
0·9 A	Power supply			0047 98(2)	
	MCB/Fuse			CTP	0069 12 (1 A)
1 A	Power supply	0470 01		0470 21	
	MCB/Fuse	T 1 A L(1)	0069 12 (1 A)	T 1 A L(1)	0069 12 (1 A)
1·25 A	Power supply	0047 95(2)			
	MCB/Fuse	CTP	0069 13 (2 A)		
2·5 A	Power supply	0470 02		0470 22	
	MCB/Fuse	T 2·5 A L(1)	0069 14 (3 A)	T 2·5 A L(1)	0069 14 (3 A)
5 A	Power supply	0470 03		0470 23	
	MCB/Fuse	T 5 A L(1)	0069 16 (6 A)	T 5 A L(1)	0069 16 (16 A)
10 A	Power supply	0470 04		0470 24	
	MCB/Fuse	T 10 A L(1)	0069 18 (10 A)	T 10 A L(1)	0069 18 (10 A)
15 A	Power supply			0470 25	
	MCB/Fuse			0133 16(3)	0069 20 (16 A)

(1) T type fuse is a time delay fuse (5 x 20 mm)
(2) Filtered modular power supply
(3) Type gG fuse 10 x 38 mm

■ Operating diagram

Operating current up to 15 A



■ Electrical characteristics

Filtered

Cat. Nos.	Voltage (V)	Current rating (A)	Weight (Kg)	Input under load 230 V (A)	Input under load 400 V (A)	Operating voltage: No-load (V)	Operating voltage: Underload (V)	Operating voltage: With 100 mA load and input voltage +10%	Operating voltage: With nominal load input voltage –15%	No-load loss (W)	Total loss at nominal load 100 % (W)	Voltage drop (%)
Output 12 V												
0470 01	12	1	1	0·12	0·06	14·4	11·7	15·5	10·3	4·4	7·3	23·5
0470 02	12	2·5	2·45	0·33	0·19	13·9	11·6	15·2	10·2	8·3	11·9	19·4
0470 03	12	5	3·6	0·60	0·34	14·1	12·1	15·5	10·5	11·4	17·1	17·2
0470 04	12	10	6·35	1·24	0·72	14·7	11·8	16·1	10·4	20·2	33·7	24·7
Output 24 V												
0470 20	24	0·5	1	0·12	0·06	27·6	22·9	29·4	20·1	4·4	7·3	20·66
0470 21	24	1	1	0·18	0·10	29·0	22·8	31·2	20·2	4·4	10·3	27·03
0470 22	24	2·5	2·45	0·47	0·27	27·8	23·3	30·4	20·4	8·3	16·3	19·46
0470 23	24	5	3·6	0·88	0·51	27·5	23·2	30·2	20·3	11·4	25·4	18·68
0470 24	24	10	6·35	1·88	1·09	27·7	23·5	30·5	20·5	20	45·3	18·20
0470 25	24	15	7·6	2·53	1·46	27·5	23·2	30·2	20·2	23	54·7	18·70

Filtered modular

Cat. Nos.	Voltage (V)	Current rating (A)	Weight (Kg)	Input under load 230 V (A)	–	Operating voltage: No-load (V)	Operating voltage: Underload (V)	Operating voltage: With 100 mA load load input voltage +10%	Operating voltage: With nominal load input voltage –15%	No-load loss (W)	Total loss at nominal load 100 % (W)	Voltage drop (%)
0047 95	12	1·3	1	0·15	–	15·1	11·8	16·3	10·4	3·4	8·7	28·5
0047 97	24	0·5	1	0·13	–	28·9	23·6	30·6	20·7	3·4	7·1	22·3
0047 98	24	0·9	1	0·17	–	29·9	22·8	32·0	20·3	3·4	10·4	31·0