

Compact power supply units – three phase



Three phase, to EN 60742

Primary to DIN IEC 38 A

Output to EN 61131-2

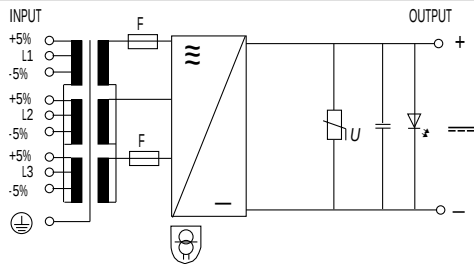
Touch-protected (VBG 4)

MDG

Input voltage 3 x 400 V AC $\pm 5\%$ tapings
Smoothing capacitor

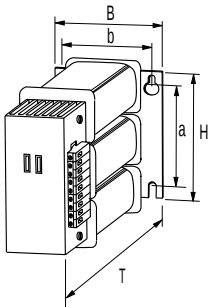


Circuit diagram



Ordering data		Art.-No.
	Output rating	
24 V DC/2,5 A	60 W	85771
24 V DC/5,0 A	120 W	85773
24 V DC/7,5 A	180 W	85775
24 V DC/10 A	240 W	85777
24 V DC/15 A	360 W	85779
24 V DC/20 A	480 W	85781

Technical data	Input
Input voltage	3 x 400 V AC $\pm 5\%$ tapings
Input current	0,1/0,2/0,3/0,4/0,6/0,8 A
Input fuse (external)	0,2/ 0,4/ 0,5/ 0,63/ 1,0/ 1,6 A tr
Frequency	50/60 Hz
Technical data	Output
Output voltage	24 V DC to EN 61131-2
Max. current	2,5/5/7,5/10/15/20 A
Effective ripple	< 2 %
Output fuse	2 x 3 A/2 x 5 A/2 x 7,5 A/2 x 10 A/2 x 15 A/2 x 20 A (automotive type fuse FKS)
Output suppression	LED, VDR and smoothing capacitors
General data	
Test voltage	to EN 60742
Temperature range	-20...+60 °C
Mounting method	key-hole mounting
Dimension drawing / fixing centers	



	H x ¹⁾ B x T	a x ¹⁾ b x c	Weight
2,5 A	125 x 87 x 146	100 x 45 x 5	2,4 kg
5,0 A	125 x 87 x 146	100 x 55 x 5	3,0 kg
7,5 A	185 x 93 x 178	164 x 57,5 x 6,5	4,5 kg
10 A	185 x 97 x 178	164 x 57,5 x 6,5	4,8 kg
15 A	185 x 107 x 178	164 x 71,5 x 6,5	6,2 kg
20 A	220 x 115 x 215	195 x 59 x 8	7,8 kg

Notes
In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel. ¹⁾ Tolerance ± 1 mm. Replacement fuses on page 4.13.2

Three phase, to EN 60742

Primary $\pm 5\%$ tapings

Output to EN 61131-2

Touch-protected (VBG 4)

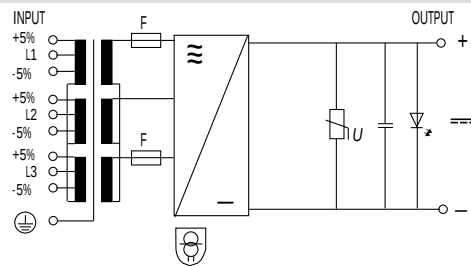


MDG

Input voltage 3 x 400 V AC $\pm 5\%$ tapings
Smoothing capacitor



Circuit diagram



Ordering data

	Output rating	Art.-No.
24 V DC/25 A	600 W	85783
24 V DC/30 A	720 W	85785
24 V DC/40 A	960 W	85787
24 V DC/50 A	1200 W	85789
24 V DC/60 A	1440 W	¹⁾ 85793

Technical data

Input

Input voltage	3 x 400 V AC $\pm 5\%$ tapings
Input current	1,17/1,39/1,88/2,27/2,82 A
Input fuse (external)	1,6/ 2,0/ 3,15/ 4,0/ motor protection switch 3 A
Frequency	50/60 Hz

Technical data

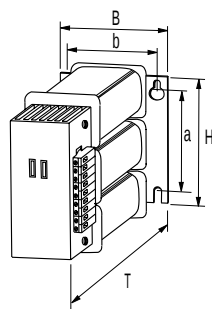
Output

Output voltage	24 V DC to EN 61131-2
Max. output current	25/30/40/50/60 A
Effective ripple	< 2 %
Output fuse	2 x 25 A/2 x 30 A/2 x 40 A/2 x 50 A (automotive type fuse FKS)
Output suppression	LED, VDR and smoothing capacitors

General data

Test voltage	to EN 60742
Temperature range	-20...+60 °C
Mounting method	key-hole mounting

Dimension drawing / fixing centers



	H x ²⁾ B x T	a x ²⁾ b x c	Weight
25 A	220 x 125 x 215	195 x 79,5 x 8	11,1 kg
30 A	240 x 120 x 238	215 x 87,0 x 8	13,2 kg
40 A	280 x 135 x 270	256,5 x 96 x 11	15,9 kg
50 A	280 x 143 x 270	256,5 x 106 x 11	17,8 kg
60 A	280 x 170 x 270	256,5 x 116 x 11	21,5 kg

Notes

In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel.

¹⁾ no fuse ²⁾ Tolerance ± 1 mm. Replacement fuses on page 4.13.2

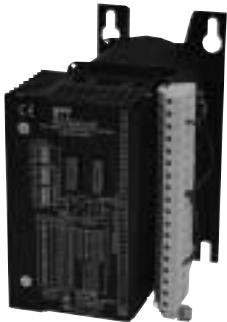
Compact power supply units – three phase



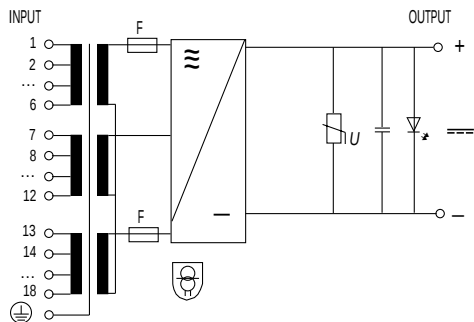
Three phase, to EN 60742
Primary to DIN IEC 38 A
Output to EN 61131-2
Touch-protected (VBG 4)

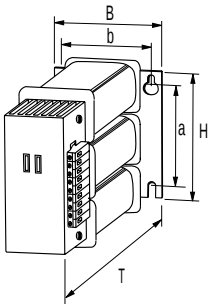


MDG
Multiple primary voltages 3 x 208...520 V AC
Smoothing capacitor



Circuit diagram



Ordering data		Art.-No.	Art.-No.		
	Output rating				
24 V DC/10 A	240 W	85794			
24 V DC/15 A	360 W		85795		
Technical data		Input			
Input voltage (fuse external)		3 x 208...520 V AC			
Frequency		50/60 Hz			
Technical data		Output			
Output voltage		24 V DC to EN 61131-2			
Max. output current		10 A	15 A		
Effective ripple		< 2 %			
Output fuse		2 x 10 A (automotive type fuse FKS)	2 x 15 A (automotive type fuse FKS)		
Output suppression		LED, VDR and smoothing capacitors			
General data					
Test voltage		to EN 60742			
Temperature range		-20...+60 °C			
Mounting method		key-hole mounting			
Dimension drawing / fixing centers					
			H x ¹⁾ B x T	a x ¹⁾ b x c	Weight
		10 A	185 x 114 x 178	164 x 71,5 x 6,5	6,0 kg
		15 A	220 x 122 x 215	195 x 59 x 8,0	7,6 kg
		25 A	220 x 132 x 215	195 x 79,5 x 8,0	11,6 kg
		40 A	280 x 142 x 270	256,5 x 95 x 11,0	17,7 kg
		50 A	280 x 152 x 270	256,5 x 105 x 11,0	21,3 kg
Notes		In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel. ¹⁾ Tolerance ± 1 mm Replacement fuses on page 4.13.2			

Three phase, to EN 60742

Primary to DIN IEC 38 A

Output to EN 61131-2

Touch-protected (VBG 4)



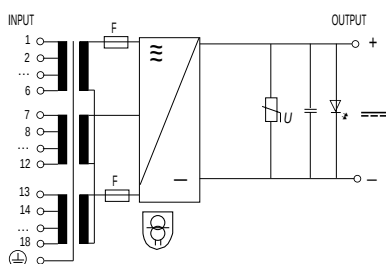
MDG

Multiple primary voltages 3 x 208...520 V AC

Smoothing capacitor



Circuit diagram



Ordering data	Art.-No.	Art.-No.	Art.-No.
Output rating			
24 V DC / 25 A 600 W	85796		
24 V DC / 40 A 960 W		85797	
24 V DC / 50 A 1200 W			85798

Technical data	Input			
Input voltage (fuse external)	3 x 208...520 V AC			
Frequency	50/60 Hz			
Technical data	Output			
Output voltage	24 V DC to EN 61131-2			
Max. output current	25 A	40 A	50 A	
Effective ripple	< 2 %			
Output fuse	2 x 25 A (automotive type fuse FKS)	2 x 40 A (automotive type fuse FKS)	2 x 50 A (automotive type fuse FKS)	
Output suppression	LED, VDR and smoothing capacitors			

General data	
Test voltage	to EN 60742
Temperature range	-20...+60 °C
Mounting method	key-hole mounting

Wiring possibilities	Input voltage	Conn. terminals	Bridges	Fusing (slow blow)	10 A	15 A	25 A	40 A	50 A
	208	3 9 15	4 · 9, 10 · 15, 16 · 3		1,50	2,00	3,20	5,00	7,00
	220	2 8 14	4 · 8, 10 · 14, 16 · 2		1,25	2,00	3,00	5,00	6,25
	230	1 7 13	4 · 7, 10 · 13, 16 · 1		1,25	1,80	3,00	5,00	6,00
	242	3 9 15	5 · 9, 11 · 15, 17 · 3		1,20	1,80	2,80	5,00	6,00
	254	2 8 14	5 · 8, 11 · 14, 17 · 2		1,20	1,60	2,80	5,00	6,00
	266	1 7 13	5 · 7, 11 · 13, 17 · 1		1,00	1,60	2,50	4,00	5,00
	278	3 9 15	6 · 9, 12 · 15, 18 · 3		1,00	1,50	2,50	4,00	5,00
	289	2 8 14	6 · 8, 12 · 14, 18 · 2		1,00	1,50	2,50	4,00	5,00
	300	1 7 13	6 · 7, 12 · 13, 18 · 1		1,00	1,50	2,25	3,50	4,50
	360	3 9 15	4 · 10 · 16		0,80	1,25	2,00	3,00	4,00
	380	2 8 14	4 · 10 · 16		0,80	1,13	2,00	3,00	3,50
	400*	1 7 13	4 · 10 · 16		0,80	1,13	2,00	3,00	3,50
	420	3 9 15	5 · 11 · 17		0,80	1,00	1,60	2,50	3,25
	440	2 8 14	5 · 11 · 17		0,60	1,00	1,50	2,50	3,00
	460	1 7 13	5 · 11 · 17		0,60	1,00	1,50	2,50	3,00
	480	3 9 15	6 · 12 · 18		0,60	1,00	1,50	2,25	2,80
	500	2 8 14	6 · 12 · 18		0,60	0,80	1,50	2,25	2,80
	520	1 7 13	6 · 12 · 18		0,60	0,80	1,25	2,00	2,80

Notes	In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel. Replacement fuses on page 4.13.2
-------	---

Compact power supply units – three phase



Three phase, to EN 61558

Primary to DIN IEC 38 A

Output to EN 61131-2

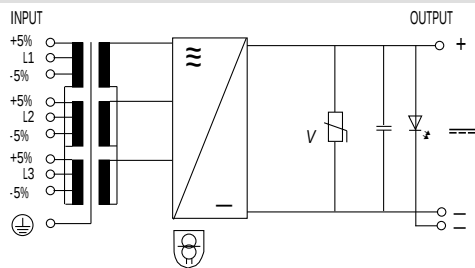
Touch-protected (VBG 4)

MPL

Input voltage 3 x 400 V AC $\pm 5\%$ tapings
Smoothing capacitor



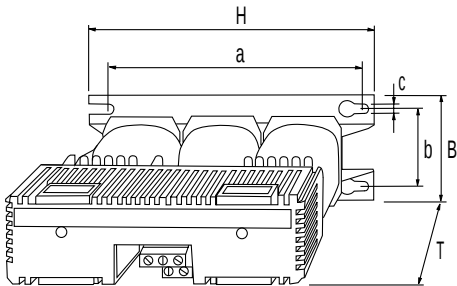
Circuit diagram



Ordering data		Art.-No.
	Output rating	
24 V DC/5,0 A	120 W	85921
24 V DC/7,5 A	180 W	85923
24 V DC/10 A	240 W	85925
24 V DC/15 A	360 W	85927
24 V DC/20 A	480 W	85929

Technical data	Input
Input voltage	3 x 400 V AC $\pm 5\%$ tapings
Input current	0,24/0,34/0,46/0,66/0,9 A
Input fuse (external)	0,4/ 0,5/ 0,63/ 1,0/ 1,6 A tr
Frequency	50/60 Hz
Technical data	Output
Output voltage	24 V DC to EN 61131-2
Max. output current	5/7,5/10/15/20 A
Effective ripple	< 2 %
Output fuse (external)	5/7,5/10/15/20 A tr
Output suppression	LED, VDR and smoothing capacitors
General data	
Test voltage	to EN 61558
Temperature range	-20...+55 °C when horizontally mounted; -20...+40 °C at any position
Mounting method	key-hole mounting

Dimension drawing / fixing centers



	H x B x T	a x b x c	Weight
5 A	125 x 72,5 x 153	100 x 56,5 x 5	2,85 kg
7,5 A	185 x 78 x 188	164 x 58 x 6,5	4,4 kg
10 A	185 x 78 x 188	164 x 58 x 6,5	4,8 kg
15 A	220 x 82 x 208	195 x 60 x 8	8,15 kg
20 A	220 x 103 x 213	195 x 81 x 8,5	10,5 kg

Notes
In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel.

Compact power supply units – three phase

Three phase, to EN 61558

Primary to DIN IEC 38 A

Output to EN 61131-2

Touch-protected (VBG 4)



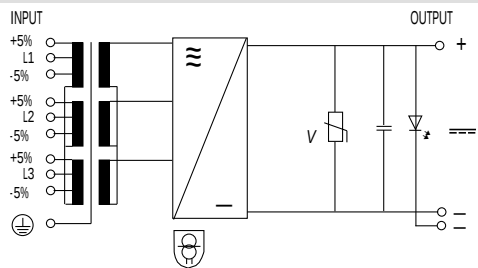
MPL

Input voltage 3 x 400 V AC $\pm 5\%$ tapings

Smoothing capacitor



Circuit diagram



Ordering data		Art.-No.
	Output rating	
24 V DC/25 A	600 W	85931
24 V DC/30 A	720 W	85933
24 V DC/40 A	960 W	85935
24 V DC/50 A	1200 W	85937
24 V DC/60 A	1440 W	85939

Technical data	Input
Input voltage	3 x 400 V AC $\pm 5\%$ tapings
Input current	1,17/1,3/1,7/2,2/2,6 A
Input fuse (external)	1,6/2,0/3,15/4,0/4,0 A tr
Frequency	50/60 Hz
Technical data	Output
Output voltage	24 V DC to EN 61131-2
Max. output current	25/30/40/50/60 A
Effective ripple	< 2 %
Output fuse (external)	25/30/40/50/60 A tr
Output suppression	LED, VDR and smoothing capacitors
General data	
Test voltage	to EN 61558
Temperature range	-20...+55 °C when horizontally mounted; -20...+40 °C at any position
Mounting method	key-hole mounting

Dimension drawing / fixing centers

Technical drawing of a power supply unit showing dimensions:

- H: Total width
- a: Width of the main body
- c: Width of the side flange
- b: Height of the main body
- B: Total height
- T: Total depth

	H x B x T	a x b x c	Weight
25 A	220 x 103 x 213	195 x 81 x 8,5	11 kg
30 A	240 x 107 x 250	215 x 87 x 8,5	13,5 kg
40 A	280 x 124 x 313	256,5 x 98 x 11	17,8 kg
50 A	280 x 134 x 313	256,5 x 108 x 11	20,9 kg
60 A	280 x 154 x 313	256,5 x 128 x 11	26,1 kg

Notes
In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel.

Compact power supply units – three phase



Three phase, to EN 61558

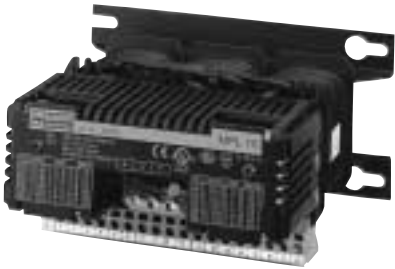
Primary to DIN IEC 38 A

Output to EN 61131-2

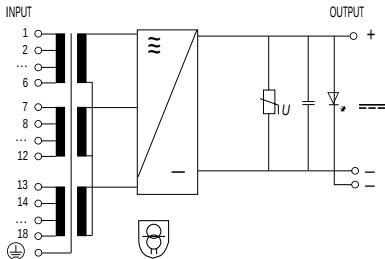
Touch-protected (VBG 4)

MPL

Input voltage 3 x 208...520 V AC
Smoothing capacitor



Circuit diagram



Ordering data		Art.-No.	Art.-No.
Output rating			
24 V DC/10 A	240 W	85953	
24 V DC/15 A	360 W		85954

Technical data	Input
Input voltage (fuse external)	3 x 208...520 V AC
Frequency	50/60 Hz
Technical data	Output
Output voltage	24 V DC to EN 61131-2
Max. output current	10 A15 A
Effective ripple	< 5 %
Output fuse (external)	10 A tr.15 A tr.
Output suppression	LED, VDR and smoothing capacitors
General data	
Test voltage	to EN 61558
Temperature range	-20...+60 °C when horizontally mounted; -20...+45 °C at any position
Mounting method	key-hole mounting

Dimension drawing / fixing centers		H x B x T	a x b x c	Weight
	10 A	185 x 93 x 188	164 x 74 x 6,5	6,6 kg
	15 A	220 x 82 x 208	195 x 60 x 8	7,5 kg
	25 A	220 x 103 x 213	195 x 81 x 8,5	11,1 kg
	40 A	280 x 124 x 313	256,5 x 98 x 11	17,9 kg
	50 A	280 x 134 x 313	256,5 x 108 x 11	20,9 kg

Notes
In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel.

Compact power supply units – three phase

Three phase, to EN 61558

Primary to DIN IEC 38 A

Output to EN 61131-2

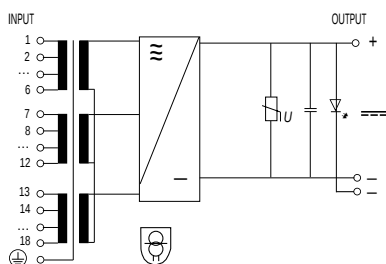
Touch-protected (VBG 4)

MPL

Multiple primary voltages 3 x 208...520 V AC
Smoothing capacitor



Circuit diagram



Ordering data	Art.-No.	Art.-No.	Art.-No.
Output rating			
24 V DC / 25 A 600 W	85955		
24 V DC / 40 A 960 W		85956	
24 V DC / 50 A 1200 W			85957

Technical data	Input			
Input voltage (fuse external)	3 x 208...520 V AC			
Frequency	50/60 Hz			
Technical data	Output			
Output voltage	24 V DC to EN 61131-2			
Max. output current	25 A	40 A	50 A	
Effective ripple	< 2 %			
Output fuse (external)	25 A tr.	40 A tr.	50 A tr.	
Output suppression	LED, VDR and smoothing capacitors			

General data	
Test voltage	to EN 61558
Temperature range	-20...+60 °C when horizontally mounted; -20...+45 ° at any position
Mounting method	key-hole mounting

Wiring possibilities	Input voltage	Conn. terminals	Bridges	Fusing (slow blow)	10 A	15 A	25 A	40 A	50 A
	208	3 9 15	4 · 9, 10 · 15, 16 · 3		1,50	2,00	3,20	5,00	7,00
	220	2 8 14	4 · 8, 10 · 14, 16 · 2		1,25	2,00	3,00	5,00	6,25
	230	1 7 13	4 · 7, 10 · 13, 16 · 1		1,25	1,80	3,00	5,00	6,00
	242	3 9 15	5 · 9, 11 · 15, 17 · 3		1,20	1,80	2,80	5,00	6,00
	254	2 8 14	5 · 8, 11 · 14, 17 · 2		1,20	1,60	2,80	5,00	6,00
	266	1 7 13	5 · 7, 11 · 13, 17 · 1		1,00	1,60	2,50	4,00	5,00
	278	3 9 15	6 · 9, 12 · 15, 18 · 3		1,00	1,50	2,50	4,00	5,00
	289	2 8 14	6 · 8, 12 · 14, 18 · 2		1,00	1,50	2,50	4,00	5,00
	300	1 7 13	6 · 7, 12 · 13, 18 · 1		1,00	1,50	2,25	3,50	4,50
	360	3 9 15	4 · 10 · 16		0,80	1,25	2,00	3,00	4,00
	380	2 8 14	4 · 10 · 16		0,80	1,125	2,00	3,00	3,50
	400*	1 7 13	4 · 10 · 16		0,80	1,125	2,00	3,00	3,50
	420	3 9 15	5 · 11 · 17		0,80	1,00	1,60	2,50	3,25
	440	2 8 14	5 · 11 · 17		0,60	1,00	1,50	2,50	3,00
	460	1 7 13	5 · 11 · 17		0,60	1,00	1,50	2,50	3,00
	480	3 9 15	6 · 12 · 18		0,60	1,00	1,50	2,25	2,80
	500	2 8 14	6 · 12 · 18		0,50	0,80	1,50	2,25	2,80
	520	1 7 13	6 · 12 · 18		0,50	0,80	1,25	2,00	2,80

Notes	In order to guarantee heat dissipation by convection, the unit must be mounted in the position shown, on the back panel.
-------	--

Compact power supply units – three phase



Three phase, to EN 60742

Touch-protected (VBG 4)

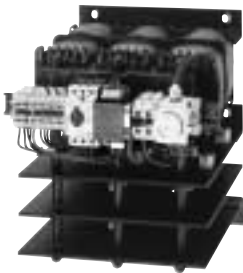
Primary $\pm 5\%$ % tapings

NGD

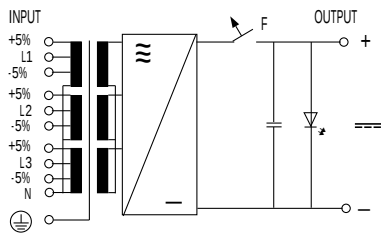
Input voltage 3 x 400 V AC $\pm 5\%$ %
with circuit breaker, no smoothing capacitor on the DC side

NGD

Input voltage 3 x 400 V AC $\pm 5\%$ %
no circuit breaker, smoothing capacitor on the DC side



Circuit diagram



Ordering data		Art.-No.	Art.-No.
	Output rating		
24 V DC/100 A	2400 W	85499	
24 V DC/100 A	2400 W		856252

Technical data	Input	
Input voltage	3 x 400 V AC $\pm 5\%$ % tapings	
Input current	4,4 A	
Input fuse	400 V AC	PKZM 1...6 A 5 A (motor protection switch external)
Frequency	50/60 Hz	

Technical data	Output	
Output voltage	24 V DC to EN 61131-2	
Max. output current	100 A	
Effective ripple	< 5 %	< 2 %
Output fuse	NEOZED 100 A	—
Output suppression	LED green, VDR	LED green, VDR and smoothing capacitors

General data	
Test voltage	to EN 60742
Temperature range	-20...+60 °C
Mounting method	screw mounting

Dimension drawing / fixing centers			H x B x T	a x b x c	Weight
		100 A	300 x 370 x 360	240 x 339 x 10,5	51 kg

Notes	
-------	--