

## RECTIFIED POWER SUPPLIES

### Single-phase, single-/two-phase, smoothed



#### MEN

Rectified power supplies with smoothed output voltage.

The units are touch protected and have an integrated output fuse up to 7.5 A on the secondary AC-circuit.

Input voltage: 115/230 V AC and 230/400 V AC  $\pm$  15 V AC reconnectable.  
Output voltage: 24 V DC (SELV)  
output current: 1.0/ 2.5/ 5/ 7.5/ 10/ 15 or 20 A

from page 1.2.3



#### MTPS

Rectified power supplies with smoothed output voltage.

The units are touch protected and have an integrated output fuse up to 6 A on the secondary AC-circuit.

Input voltage: 230/400 V AC  $\pm$  15 V AC reconnectable  
Output voltage: 24 V DC (SELV)  
Output current: 0.5/ 1/ 2/ 4/ 6/ 10 A

from page 1.2.7

### Single-phase, single-/two-phase, linear regulated



#### NLS

The linear regulated power supplies in this series are very stable and have an extremely low ripple.

The units are touch protected, overload and short-circuit protected. DIN-rail mountable.

The integrated electronics allow a short term loading many times higher than the nominal current.

Input voltage: 230/400 V AC  
Output voltage: 24 V DC (SELV)  
Output current: 0.5/ 1/ 2/ 4 A

from page 1.2.9



#### MKN

Low power P.S.U in the MCVO housing, DIN-rail mountable.

They require minimal space and have a stable output voltage.

Input voltage: 230 V AC  
Output voltage: 5, 10,  $\pm$ 10,  $\pm$ 15 or 24 V DC as well as an adjustable version 9.5...15 V DC (each SELV)  
Output current: 70...200 mA

from page 1.2.11

### Three-phase, smoothed



#### MPL

Power supplies with smoothed output voltage. The units are touch protected.

Input voltage: 3 x 400 V AC  $\pm$  5 % reconnectable  
3 x 208...520 V AC  
Output voltage: 24 V DC (SELV)  
Output current: 5...60 A

from page 1.2.13

# RECTIFIED POWER SUPPLIES

Single-phase smoothed

– acc. to EN 61558

– touch protected acc. to EN 61558

Approvals:

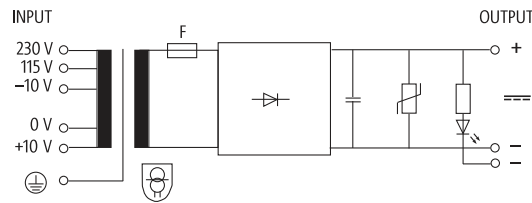


**MEN**

Input voltage 115/ 230 V AC  
± 10 V AC reconnectable



## Circuit diagram



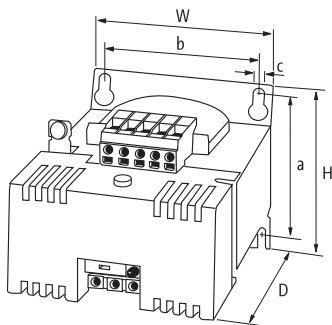
Ordering data		Art.-No.	Art.-No.	Art.-No.	Art.-No.
Output rating		With/without snap-on adapter	With/without snap-on adapter	With/without snap-on adapter	Without snap-on adapter
24 V DC/ 1 A	24 W	8985360			
24 V DC/ 2.5 A	60 W		8985361		
24 V DC/ 5 A	120 W			8985362	
24 V DC/ 7.5 A	180 W				85363

Input					
Input voltage	115/ 230 V AC ± 10 V AC				
Input current	0.54/ 0.27 A	1.0/ 0.5 A	2.0/ 1.0 A	2.84/ 1.42 A	
Input fuse (external)	0.8/ 0.4 A T	1.6/ 0.8 A T	3.15/ 1.6 A T	3.0/ 1.5 A T	
Frequency	50/60 Hz				

Output					
Output voltage	24 V DC (SELV)				
Max. output current	Ta 60/40°C	1/ 1.5 A	2.5/ 3 A	5/ 6 A	7.5/ 9 A
Ripple	≤ 5 %				
Output fuse	3 A (automotive fuse FKS)		7.5 A (automotive fuse FKS)	10 A (automotive fuse FKS)	15 A (automotive fuse FKS)
Output filter	LED, VDR and smoothing capacitor				

General data					
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2				
Temperature range	-20...+60 °C, no condensation				
Mounting method	key-hole mounting				
Weight	1.25 kg	2.1 kg	3.0 kg	5.6 kg	
Dimensions	H x W x D	64 x 78 x 120 mm	83 x 84 x 124 mm	95 x 96 x 136 mm	103 x 105 x 150.5 mm
Fixing centers	a x b x c	47.5 x 56 x 4.8 mm	65.5 x 64 x 4.8 mm	75 x 84 x 5.8 mm	86.5 x 90 x 5.8 mm

## Dimension drawing/ fixing



**Notes**  
MEN rectified power supplies meet the EN 61000-3-2 guideline. Products without snap-on adapter Art.-No. change from 8985... into 85... (89 will dropp). Replacement fuses see page 1.2.17.

# RECTIFIED POWER SUPPLIES

Single-phase  
smoothed

– acc. to EN 61558

– touch protected acc. to  
EN 61558

Approvals:

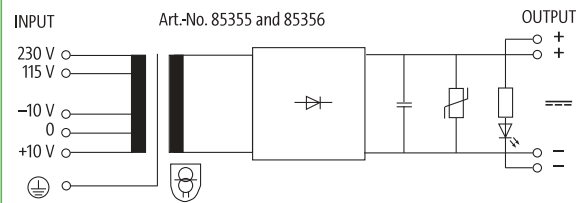


## MEN

Input voltage 115/230 V AC  
± 10 V AC reconnectable



### Circuit diagram



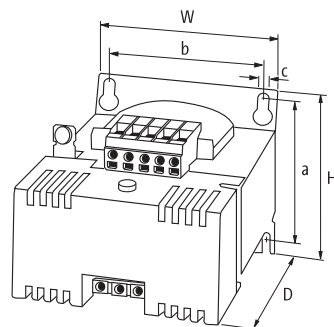
Ordering data	Output rating	Art.-No.	Art.-No.	Art.-No.
24 V DC/ 10 A	240 W	85364		
24 V DC/ 15 A	360 W		85355	
24 V DC/ 20 A	480 W			85356

Input				
Input voltage	115/ 230 V AC ± 10 V AC			
Input current	3.7/ 1.85 A	5.6/ 2.8 A	7.4/ 3.7 A	
Input fuse (external)	5.0/ 2.5 A T	8.0/ 4.0 A T	10/ 5.0 A T	
Frequency	50/60 Hz			

Output				
Output voltage	24 V DC (SELV)			
Max. output current	Ta 60/40°C	10/ 12 A	15/ 18 A	20/ 24 A
Ripple	≤ 5 %			
Output fuse	20 A (automotive fuse FKS)		–	
Output filter	LED, VDR and smoothing capacitor			

General data				
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2		EN 55011 A	
Temperature range	-20...+60 °C, no condensation			
Mounting method	key-hole mounting			
Weight	6.0 kg	8.2 kg	12.8 kg	
Dimensions	H x W x D	112.5 x 120 x 160 mm	138.5 x 135 x 181.5 mm	127 x 174 x 213.5 mm
Fixing centers	a x b x c	94.5 x 90 x 5.8 mm	126 x 104 x 6.5 mm	102 x 135 x 7 mm

### Dimension drawing/ fixing



Notes
MEN rectified power supplies meet the EN 61000-3-2 guideline, without Art.-No. 85356. Replacement fuses see page 1.2.17.

# RECTIFIED POWER SUPPLIES

Single-/two-phase smoothed

– acc. to EN 61558

– touch protected acc. to EN 61558

Approvals:

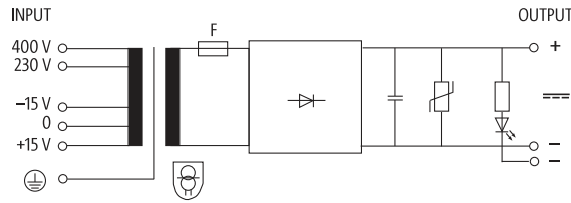


**MEN**

Input voltage 230/ 400 V AC  
± 15 V AC reconnectable

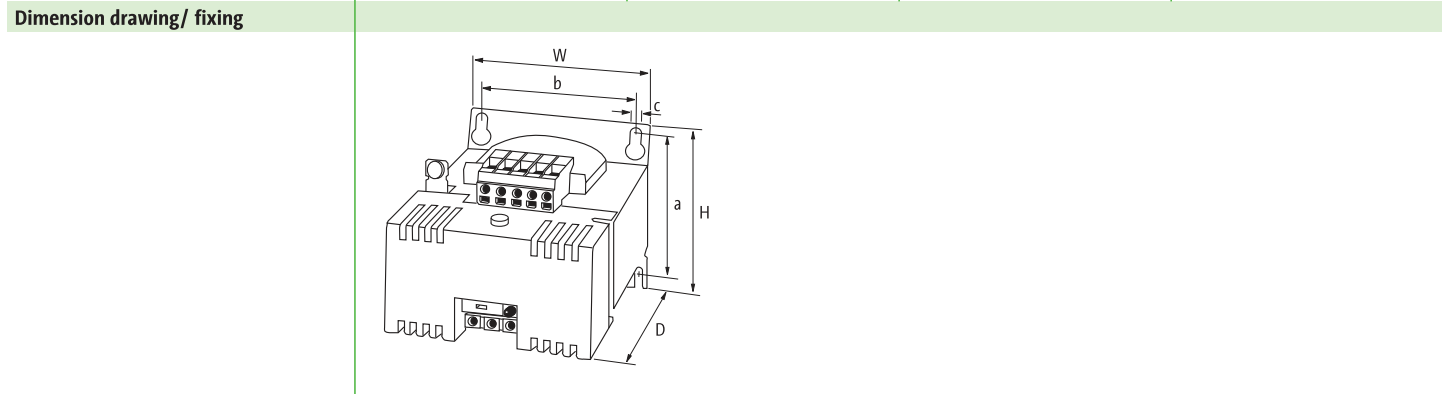


## Circuit diagram



Ordering data	Output rating	Art.-No.	Art.-No.	Art.-No.	Art.-No.
		With/without snap-on adapter	With/without snap-on adapter	With/without snap-on adapter	Without snap-on adapter
24 V DC/ 1 A	24 W	8985349			
24 V DC/ 2.5 A	60 W		8985350		
24 V DC/ 5 A	120 W			8985351	
24 V DC/ 7.5 A	180 W				85357

Input					
Input voltage	230/ 400 V AC ± 15 V AC				
Input current	0.25/ 0.145 A	0.5/ 0.28 A	0.97/ 0.56 A	1.44/ 0.84 A	
Input fuse (external)	0.4/ 0.25 A T	0.8/ 0.5 A T	1.6/ 1.0 A T	2/ 1.25 A T	
Frequency	50/60 Hz				
Output					
Output voltage	24 V DC (SELV)				
Max. output current	Ta 60/40°C	1/ 1.5 A	2.5/ 3 A	5/ 6 A	7.5/ 9 A
Ripple	≤ 5 %				
Output fuse	3 A (automotive fuse FKS)		7.5 A (automotive fuse FKS)	10 A (automotive fuse FKS)	15 A (automotive fuse FKS)
Output filter	LED, VDR and smoothing capacitor				
General data					
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2				
Temperature range	-20...+60 °C, no condensation				
Mounting method	key-hole mounting				
Weight	1.25 kg	2.1 kg	3 kg	5.6 kg	
Dimensions	H x W x D	64 x 78 x 120 mm	83 x 84 x 124 mm	95 x 96 x 136 mm	103 x 105 x 150.5 mm
Fixing centers	a x b x c	47.5 x 56 x 4.8 mm	65.5 x 64 x 4.8 mm	75 x 84 x 5.8 mm	86.5 x 90 x 5.8 mm



**Notes**  
MEN rectified power supplies meet the EN 61000-3-2 guideline. Products without snap-on adapter Art.-No. change from 8985... into 85... (89 will dropp). Replacement fuses see page 1.2.17.

# RECTIFIED POWER SUPPLIES

Single-/two-phase  
smoothed

– acc. to EN 61558

– touch protected acc. to  
EN 61558

Approvals:

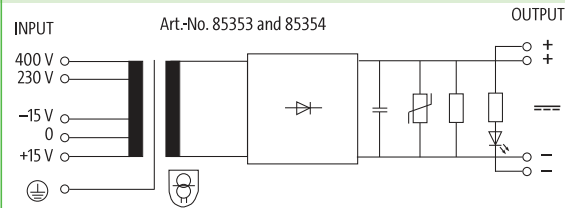


## MEN

Input voltage 230/ 400 V AC  
± 15 V AC reconnectable



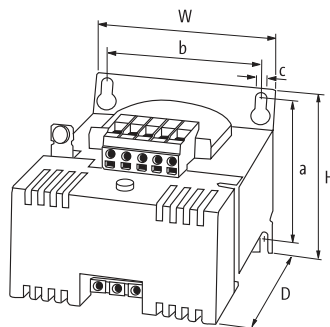
### Circuit diagram



Ordering data	Output rating	Art.-No.	Art.-No.	Art.-No.
24 V DC/ 10 A	240 W	85352		
24 V DC/ 15 A	360 W		85353	
24 V DC/ 20 A	480 W			85354

Input		Output		
Input voltage	230/ 400 V AC ± 15 V AC			
Input current	1.7/ 0.97 A	2.8/ 1.65 A	3.7/ 2.15 A	
Input fuse (external)	3.15/ 1.6 A T	4/ 2.5 A T	5/ 3.15 A T	
Frequency	50/60 Hz			
Output				
Output voltage	24 V DC (SELV)			
Max. output current	Ta 60/40°C	10/ 12 A	15/ 18 A	20/ 24 A
Ripple	≤ 5 %			
Output fuse	20 A (automotive fuse FKS)	–		
Output filter	LED, VDR and smoothing capacitor			
General data				
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2	EN 55011 A		
Temperature range	-20...+60 °C, no condensation			
Mounting method	key-hole mounting			
Weight	6 kg	8.2 kg	12.8 kg	
Dimensions	H x W x D	112.5 x 120 x 160 mm	138.5 x 135 x 181.5 mm	127 x 174 x 213.5 mm
Fixing centers	a x b x c	94.5 x 90 x 5.8 mm	126 x 104 x 6.5 mm	102 x 135 x 7 mm

### Dimension drawing/ fixing



### Notes

MEN rectified power supplies meet the EN 61000-3-2 guideline, except Art.-No. 85354. Replacement fuses see page 1.2.17.

# RECTIFIED POWER SUPPLIES

Single-/two-phase smoothed

– acc. to EN 61558

– touch protected acc. to EN 60529 (IP20)

Approvals:

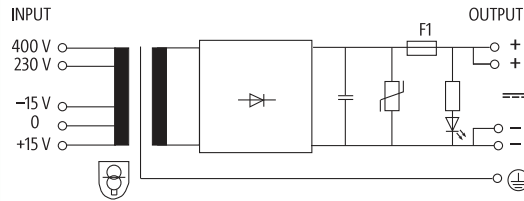


## MTPS

Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 24 V DC (SELV)



### Circuit diagram



Ordering data	Output rating	Art.-No.	Art.-No.	Art.-No.
24 V DC / 0.5 A	12 W	85400		
24 V DC / 1 A	24 W		85401	
24 V DC / 2 A	48 W			85402

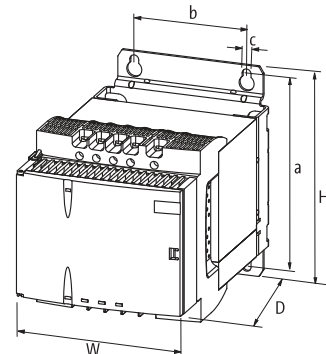
Accessories	Art.-No.
Label plate	quantity: 10 pieces 89661

Input			
Input voltage	230/ 400 V AC $\pm 15$ V AC		
Input current	0.10/ 0.06 A	0.16/ 0.11 A	0.37/ 0.21 A
Input fuse (external)	0.125/0.1 AT	0.2/0.15 AT	0.5/0.3 AT
Frequency	50/60 Hz		
LED display	LED green for input voltage		

Output			
Output voltage	24 V DC (SELV)		
Max. output current	0.5 A	1 A	2 A
Ripple	$\leq 5\%$		
Output fuse F1 (page 1.2.17)	0.5 AT	1 AT	2 AT
LED display	LED green for output voltage		

General data			
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2		
Temperature range	-20...+60 °C, no condensation		
Mounting method	DIN-rail mounting TH35-15 (EN 60715) or key-hole mounting		
Weight	1.28 kg	1.3 kg	2 kg
Dimensions	H x W x D (a x b x c)	108 x 87 x 124 mm (96 x 60 x 5.5 mm)	108 x 87 x 142 mm (96 x 60 x 5.5 mm)

### Dimension drawing/ fixing



Notes
MTPS rectified power supplies meet the EN 61000-3-2 guideline. Replacement fuses see page 1.2.17

# RECTIFIED POWER SUPPLIES

Single-/two-phase  
smoothed

– acc. to EN 61558

– touch protected acc. to  
EN 60529 (IP20)

Approvals:

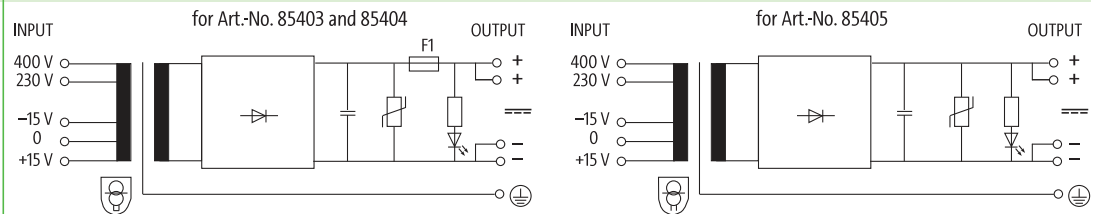


## MTPS

Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 24 V DC (SELV)

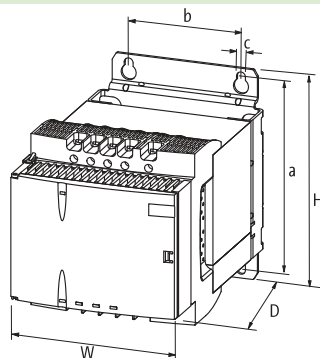


### Circuit diagram



Ordering data	Art.-No.	Art.-No.	Art.-No.
Output rating			
24 V DC/ 4 A	85403		
24 V DC/ 6 A		85404	
24 V DC/ 10 A			85405
Accessories	Art.-No.		Art.-No.
Label plate	quantity: 10 pieces		89661

Input			
Input voltage	230/ 400 V AC $\pm 15$ V AC		
Input current	0.79/ 0.46 A	1/ 0.57 A	1.6/ 0.92 A
Input fuse (external)	1 AT/0.6 AT	1.25 AT/0.8 AT	2 AT/1.25 AT
Frequency	50/60 Hz		
LED display	LED green for input voltage		
Output			
Output voltage	24 V DC (SELV)		
Max. output current	4 A	6 A	10 A
Ripple	$\leq 5$ %		
Output fuse F1 (page 1.2.17)	4 AT	6.3 AT	10 AT (external)
LED display	LED green for output voltage		
General data			
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2		
Temperature range	-20...+60 °C, no condensation		
Mounting method	DIN-rail mounting TH35-15 (EN 60715) up to 4 A or key-hole mounting		
Weight	2.9 kg	4.94 kg	7.66 kg
Dimensions H x W x D (a x b x c)	108 x 87 x 165 mm (96 x 60 x 5.5 mm)	153 x 123 x 153 mm (136 x 82 x 6.5 mm)	153 x 123 x 185 mm (136 x 82 x 6.5 mm)
Dimension drawing/ fixing			



Notes
MTPS rectified power supplies meet the EN 61000-3-2 guideline. Replacement fuses see page 1.2.17

# RECTIFIED POWER SUPPLIES

Single-/two-phase  
linear regulated

- acc. to EN 61558
- stabilized output voltage
- short-circuit and overload protected
- touch protected acc. to EN 60529 (IP20)

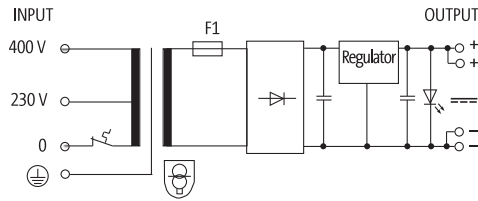
Approvals: 

Circuit diagram

**NLS 0.5**  
Input voltage 230/ 400 V AC



**NLS 1**  
Input voltage 230/ 400 V AC

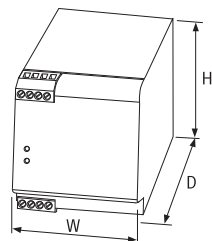


Ordering data		Art.-No.	Art.-No.
24 V DC / 0.5 A	Output rating 12 W	85631	
24 V DC / 1.0 A	Output rating 24 W		85633

Input			
Input voltage	230/ 400 V AC		
Input current	120/ 70 mA	230/ 135 mA	
Input fuse (external)	0.3/ 0.2 A T	0.6/ 0.4 A T	
Frequency	50/60 Hz		
Protection	thermal switch input inside		
Output			
Output voltage	24 V DC $\pm 2\%$ (SELV)		
Output current	0.5 A	1 A	
Max. output current	2 A (short term)	4 A (short term)	
Efficiency	0.56	0.58	
Ripple	$\leq 2$ mV		
Protection	short-circuit and overload protected		
Output fuse F1	1.25 A T (5 x 20 internal)	2.5 A T (5 x 20 internal)	
LED display	LED green: operating, LED red: fault		

General data			
Standards	EN 61558-2-6, EN 62041 category 2, EN 55011 B, EN 61000-3-2		
Temperature range	0...+60 °C, no condensation		
Mounting method	DIN-rail mounting TH35 (EN 60715)		
Weight	0.62 kg	0.92 kg	
Dimensions	H x W x D	75 x 45 x 118 mm	75 x 67.5 x 118 mm

Dimension drawing/ fixing



**Notes**  
NLS rectified power supplies meet the EN 61000-3-2 guideline.



## RECTIFIED POWER SUPPLIES

Single-/two-phase  
linear regulated

- acc. to EN 61558
- stabilized output voltage  
short-circuit and  
overload protected
- touch protected acc. to  
EN 60529 (IP20)

Approvals: 

### NLS 2

Input voltage 230/ 400 V AC



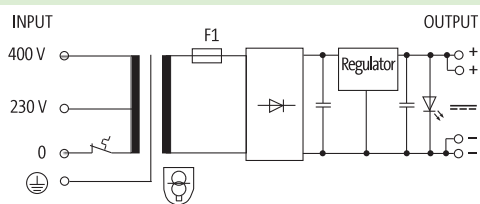
### NLS 4

Input voltage 230/ 400 V AC



Rectified power supplies

#### Circuit diagram

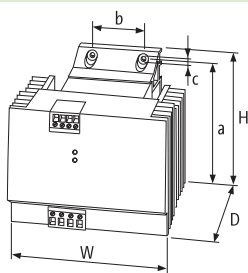


Ordering data		Art.-No.	Art.-No.
24 V DC / 2.0 A	Output rating	85635	
24 V DC / 4.0 A	96 W		85637

Input			
Input voltage	230/ 400 V AC		
Input current	0.46/ 0.27 A	0.85/ 0.49 A	
Input fuse (external)	1.0/ 0.6 A T	1.6/ 1.0 A T	
Frequency	50/60 Hz		
Protection	thermal switch input inside		
Output			
Output voltage	24 V DC $\pm$ 2 % (SELV)		
Output current	2 A	4 A	
Max. output current	6 A (short term)	12 A (short term)	
Efficiency	0.59		
Ripple	$\leq$ 2 mV	$\leq$ 10 mV	
Protection	short-circuit and overload protected		
Output fuse F1	5 A T (5 x 20 internal)	10 A T (5 x 20 internal)	
LED display	LED green: operating, LED red: fault		

General data			
Standards	EN 61558-2-6, EN 62041 category 2, EN 55011 B, EN 61000-3-2		
Temperature range	0...+60 °C, no condensation		
Mounting method	DIN-rail mounting TH35 (EN 60715); key-hole mounting/screw fixing		
Weight	2.5 kg	4.5 kg	
Dimensions	H x W x D	110 x 128 x 135 mm	110 x 172 x 161 mm
Fixing centers	a x b x c	98 x 44 x 4.5 mm	98 x 80 x 4.5 mm

#### Dimension drawing/ fixing



Notes	
NLS rectified power supplies meet the EN 61000-3-2 guideline.	

# RECTIFIED POWER SUPPLIES

Single-phase, compact linear regulated

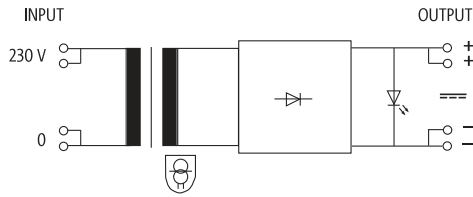
- acc. to EN 61558
- stabilized output voltage
- touch protected acc. to EN 60529 (IP20)

## MKN

Low power P.S.U  
Input voltage 230 V AC



### Circuit diagram



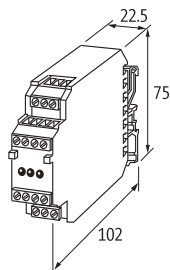
Ordering data	Art.-No.	Art.-No.	Art.-No.	Art.-No.
24 V DC/ 70 mA	85610			
10 V DC/ 80 mA		85615		
5 V DC/ 200 mA			85620	
9.5...15 V DC/ 100 mA				85625

Input			
Input voltage	230 V AC		
Input current	approx. 10 mA	approx. 20 mA	approx. 30 mA
Input fuse (external)	63 mA T		
Frequency	50/60 Hz		

Output				
Output voltage	24 V DC $\pm$ 2% (SELV)	10 V DC $\pm$ 2% (SELV)	5 V DC $\pm$ 2% (SELV)	9.5...15 V DC (SELV) adjustable
Max. output current	70 mA	80 mA	200 mA	100 mA
Ripple	$\leq$ 10 mV ss			
Output fuse	electronic overload and short-circuit protection			
Output filter	VDR and smoothing capacitor			
LED display	LED green operating			

General data			
Standards	EN 61558-2-6, EN 62041 category 2, EN 55011 B, EN 61000-3-2		
Temperature range	0...+60 °C, no condensation		
Mounting method	DIN-rail mounting TH35 or G32 (EN 60715)		
Weight	0.3 kg		
Dimensions H x W x D	75 x 22.5 x 102 mm		

### Dimension drawing/ fixing



Notes	
	MKN rectified power supplies meet the EN 61000-3-2 guideline.

## RECTIFIED POWER SUPPLIES

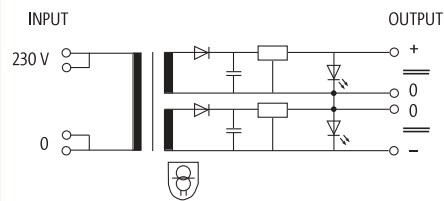
Single-phase, compact  
linear regulated

- acc. to EN 61558
- stabilized output voltage
- touch protected acc. to EN 60529 (IP20)

**MKN**  
Low power P.S.U  
Input voltage 230 V AC



### Circuit diagram



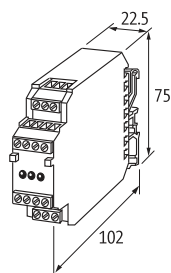
Ordering data	Art.-No.	Art.-No.
2 x 10 V DC / 2 x 50 mA	85616	
2 x 15 V DC / 2 x 35 mA		85617

Input	
Input voltage	230 V AC
Input current	approx. 20 mA
Input fuse (external)	63 mA T
Frequency	50/60 Hz

Output		
Output voltage	2 x 10 V DC $\pm$ 5 % (SELV)	2 x 15 V DC $\pm$ 5 % (SELV)
Max. output current	2 x 50 mA	2 x 35 mA
Ripple	$\leq$ 10 mV ss	
Output fuse	electronic overload and short-circuit protection	
Output filter	LED green, VDR and smoothing capacitor	
LED display	LED green operating	

General data	
Standards	EN 61558-2-6, EN 62041 category 2, EN 55011 B, EN 61000-3-2
Temperature range	0...+60 °C, no condensation
Mounting method	DIN-rail mounting TH35 or G32 (EN 60715)
Weight	0.3 kg
Dimensions H x W x D	75 x 22.5 x 102 mm

### Dimension drawing/ fixing



Notes	
	MKN rectified power supplies meet the EN 61000-3-2 guideline.

# RECTIFIED POWER SUPPLIES

Three-phase, smoothed

– acc. to EN 61558

– touch protected acc. to EN 61558

Approvals:

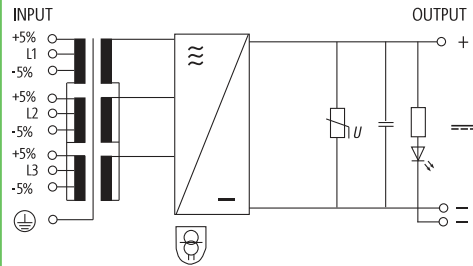


**MPL**

Input voltage 3 x 400 V AC ± 5 % reconnectable



## Circuit diagram



## Ordering data

	Output rating	Art.-No.
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

## Input

Input voltage	3 x 400 V AC ± 5 %
Input current	0.3 / 0.42 / 0.55 / 0.8 / 1.1 A
Input fuse (external)	0.4 / 0.5 / 0.63 / 1.0 / 1.6 A T
Frequency	50/60 Hz

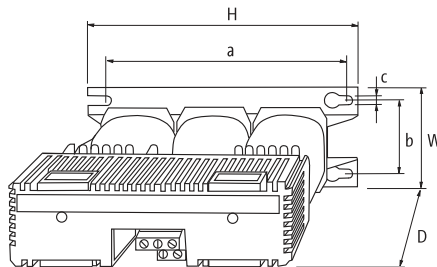
## Output

Output voltage	24 V DC (SELV)
Max. output current	5 / 7.5 / 10 / 15 / 20 A
Efficiency	0.72 / 0.72 / 0.75 / 0.77 / 0.78
Ripple	≤ 2 %
Output fuse (external)	5 / 7.5 / 10 / 15 / 20 A T
Output filter	LED, VDR and smoothing capacitor

## General data

Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2
Temperature range	-20...+55 °C, no condensation
Mounting method	key-hole mounting, at MPL 5 A (85921) no key-hole but long-hole mounting (90° position)

## Dimension drawing/ fixing (mm)



	H x W x D	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

MPL rectified power supplies meet the EN 61000-3-2 guideline.

# RECTIFIED POWER SUPPLIES

Three-phase, smoothed

– acc. to EN 61558

– touch protected acc. to EN 61558

Approvals:

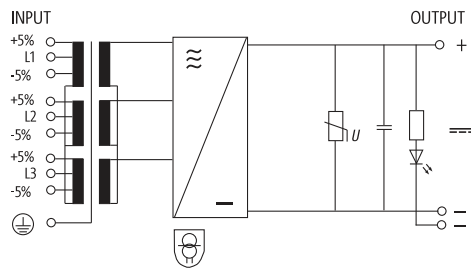


**MPL**

Input voltage 3 x 400 V AC ± 5 % reconnectable



## Circuit diagram



## Ordering data

	Output rating	Art.-No.
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

## Input

Input voltage	3 x 400 V AC ± 5 %
Input current	1.35 / 1.6 / 2.0 / 2.5 / 3.1 A
Input fuse (external)	1.6 / 2.0 / 3.15 / 4.0 / 4.0 A T
Frequency	50/60 Hz

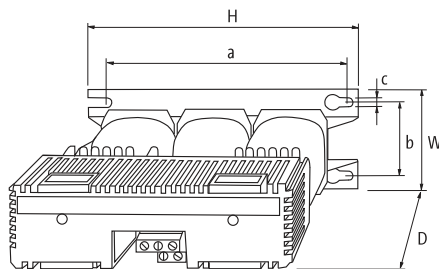
## Output

Output voltage	24 V DC (SELV)
Max. output current	25 / 30 / 40 / 50 / 60 A
Efficiency	0.78 / 0.76 / 0.77 / 0.79 / 0.78
Ripple	≤ 2 % eff
Output fuse (external)	25 / 30 / 40 / 50 / 60 A T
Output filter	LED, VDR and smoothing capacitor

## General data

Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2
Temperature range	-20...+55 °C, no condensation
Mounting method	key-hole mounting

## Dimension drawing/ fixing (mm)



	H x W x D	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

MPL rectified power supplies meet the EN 61000-3-2 guideline, not required for Art.-No. 85937 and 85939.

# RECTIFIED POWER SUPPLIES

Three-phase, smoothed  
with multiple primary voltages

– acc. to EN 61558

– touch protected acc. to  
EN 61558

Approvals:

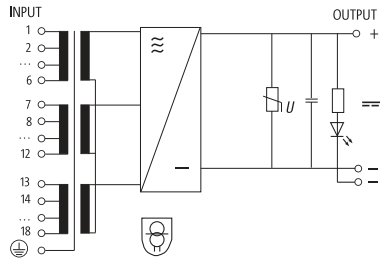


## MPL

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



### Circuit diagram



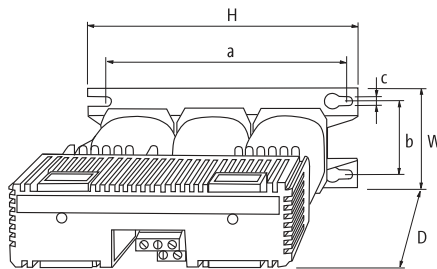
Ordering data	Art.-No.	Art.-No.	Art.-No.
Output rating			
24 V DC/ 10 A      240 W	<b>85953</b>		
24 V DC/ 15 A      360 W		<b>85954</b>	
24 V DC/ 25 A      600 W			<b>85955</b>

Input			
Input voltage (fuse external)	3 x 208...520 V AC		
Frequency	50/60 Hz		
Output			
Output voltage	24 V DC (SELV)		
Max. output current	10 A	15 A	25 A
Efficiency	0.73	0.75	0.73
Ripple	≤ 2 %		
Output fuse (external)	10 A T	15 A T	25 A T
Output filter	LED, VDR and smoothing capacitor		

General data	
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2
Temperature range	-20...+55 °C, no condensation
Mounting method	key-hole mounting

### Dimension drawing/ fixing (mm)

Connection possibilities and protection  
see page 1.2.16



	H x W x D	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

MPL rectified power supplies meet the EN 61000-3-2 guideline.

# RECTIFIED POWER SUPPLIES

Three-phase, smoothed  
with multiple primary voltages

– acc. to EN 61558

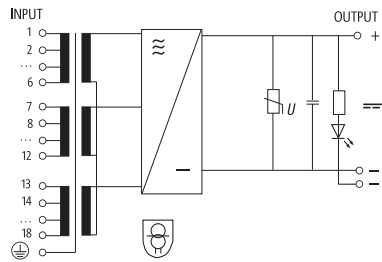
– touch protected acc. to  
EN 61558

Approvals: 

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



### Circuit diagram



Ordering data	Art.-No.	Art.-No.
Output rating		
24 V DC/ 40 A      960 W	<b>85956</b>	
24 V DC/ 50 A      1200 W		<b>85957</b>



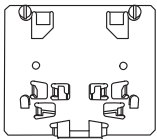
Input	
Input voltage (fuse external)	3 x 208...520 V AC
Frequency	50/60 Hz
Output	
Output voltage	24 V DC (SELV)
Max. output current	40 A
Efficiency	0.79
Ripple	≤ 2 %
Output fuse (external)	40 A T
Output filter	LED, VDR and smoothing capacitor

General data	
Standards	EN 61558-2-6, EN 62041 category 1, EN 55011 B, EN 61000-3-2
Temperature range	-20...+55 °C, no condensation
Mounting method	key-hole mounting

Connection possibilities	Input voltage	L1	L2	L3	Bridges	Protection	10 A	15 A	25 A	40 A	50 A
							(slow blow)				
Dimension drawing/ fixing (mm) see page 1.2.15	208 V AC	3	9	15	4-9, 10-15, 16-3	(slow blow)	1.50	2.00	3.20	5.00	7.00
	220 V AC	2	8	14	4-8, 10-14, 16-2		1.25	2.00	3.00	5.00	6.25
	230 V AC	1	7	13	4-7, 10-13, 16-1		1.25	1.80	3.00	5.00	6.00
	242 V AC	3	9	15	5-9, 11-15, 17-3		1.25	1.80	2.80	5.00	6.00
	254 V AC	2	8	14	5-8, 11-14, 17-2		1.25	1.60	2.80	5.00	6.00
	266 V AC	1	7	13	5-7, 11-13, 17-1		1.00	1.60	2.50	4.00	5.00
	278 V AC	3	9	15	6-9, 12-15, 18-3		1.00	1.50	2.50	4.00	5.00
	289 V AC	2	8	14	6-8, 12-14, 18-2		1.00	1.50	2.50	4.00	5.00
	300 V AC	1	7	13	6-7, 12-13, 18-1		1.00	1.50	2.25	3.50	4.50
	360 V AC	3	9	15	4-10-16		0.80	1.25	2.00	3.00	4.00
	380 V AC	2	8	14	4-10-16		0.80	1.125	2.00	3.00	3.50
	400* V AC	1	7	13	4-10-16		0.80	1.125	2.00	3.00	3.50
	420 V AC	3	9	15	5-11-17		0.80	1.00	1.60	2.50	3.25
	440 V AC	2	8	14	5-11-17		0.60	1.00	1.50	2.50	3.00
	460 V AC	1	7	13	5-11-17		0.60	1.00	1.50	2.50	3.00
	480 V AC	3	9	15	6-12-18		0.60	1.00	1.50	2.25	2.80
500 V AC	2	8	14	6-12-18	0.50	0.80	1.50	2.25	2.80		
520 V AC	1	7	13	6-12-18	0.50	0.80	1.25	2.00	2.80		

**Notes**  
\* Condition. MPL rectified power supplies meet the EN 61000-3-2 guideline, not required for Art.-No. 85957.

## ACCESSORIES

Automotive fuse FKS for MEN		Current	Color	Art.-No.	
		3 A	violet	90401	
		5 A	light brown	90403	
		7.5 A	dark brown	90404	
		10 A	red	90405	
		15 A	light blue	90406	
		20 A	yellow	90407	
Glas automotive fuse for MTPS		Current	Saturation value	suitable for	Art.-No.
		0.5 AT	200 mV	Art.-No. 85400	89650
		1.0 AT	150 mV	Art.-No. 85401	89651
		2.0 AT	150 mV	Art.-No. 85402	89652
		4.0 AT	70 mV	Art.-No. 85403	89653
		6.3 AT	70 mV	Art.-No. 85404	89654
	DIN-rail mounting MES		Current	Art.-No.	
		1 A	89440		
		2.5 A	89441		
		5 A	89443		

Notes