

RECTIFIED POWER SUPPLIES

RELIABLE AND DURABLE

- Highly reliable
- Long life span saves money
- Low interference

BASIC FUNCTIONS

Rectified power supplies galvanically separate input and output. They convert mains voltage into Protected Extra Low Voltage. The electronic unit rectifies and smooths the voltage.

Rectified power supplies are designed for a frequency of 50/60 Hz. Their slow reaction prevents voltage spikes from being passed from the mains side to the output, which would interfere with peripheral devices.

They have fixing brackets with keyholes that ensure easy wall mounting. Models for DIN-rail mounting are available for applications up to 5 A.

Single-phase, single/two-phase, smoothed



MEN

- Input voltage: 115/230 V AC and 230/400 V AC
± 15 V AC reconnectable
- Output voltage: 24 V DC SELV
- Output current: 1.0/2.5/5/7.5/10/15/20 A

Page 1.2.1



MTPS

- Input voltage: 230/400 V AC
± 15 V AC reconnectable
- Output voltage: 24 V DC SELV
- Output current: 0.5/1/2/4/6/10 A

Page 1.2.5

Single-phase, linear regulated



MKN

- Input voltage: 230 V AC
± 15 V AC reconnectable
- Output voltage: 5/10/±10/±15 or 24 V DC
and 9.5...15 V DC (per SELV)
- Output current: 70...200 mA

Page 1.2.7

Three-phase, smoothed



MPL

- Input voltage: 3 x 400 V AC ± 5 % reconnectable
3 x 208...520 V AC
- Output voltage: 24 V DC SELV
- Output current: 5...60 A

Page 1.2.8

RECTIFIED POWER SUPPLIES

Single-phase

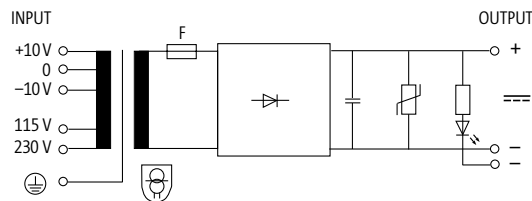
MEN
INPUT: 115/230 V AC

MEN
INPUT: 115/230 V AC
with DIN-rail adapter



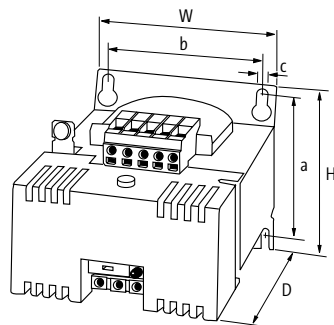
Approvals:

Circuit diagram



Order Data	H×W×D/kg	Art-No.	H×W×D/kg	Art-No.
24 V DC/1 A	64×78×120/1.3	85360	64×78×120/1.3	8985360
24 V DC/2.5 A	83×84×124/2.1	85361	83×84×124/2.1	8985361
24 V DC/5 A	95×96×136/3.0	85362	95×96×136/3.0	8985362
24 V DC/7.5 A	103×105×151/5.6	85363		
Accessories				Art-No.
Automotive fuses FKS (3 A)				90401
Automotive fuses FKS (5 A)				90403
Automotive fuses FKS (10 A)				90405
Automotive fuses FKS (15 A)				90406
Input				
Input voltage	115/230 V AC ±10 V AC			
Frequency	50/60 Hz			
Output				
Output voltage	24 V DC (SELV)			
Ripple	max. 5 % rms			
Output filter	LED, VDR and smoothing capacitor			
General data				
Standards	(EN 61558-2-6), (EN 62041 category I), (EN 55011 B), (EN 61000-3-2)			
Temperature range	-20...+60 °C, no condensation			
Mounting method	Key-hole mounting		DIN-rail mountable TH35-15 (EN 60715) or for key-hole mounting	

Dimension drawing



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes

RECTIFIED POWER SUPPLIES

Single-phase

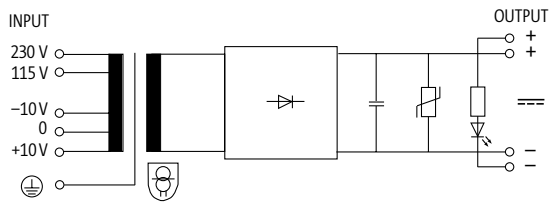
MEN

INPUT: 115/230 V AC



Approvals:  

Circuit diagram



Order Data	HxWxD/kg	Art-No.
24 V DC/10 A	113x120x160/6.0	85364
24 V DC/15 A	139x135x182/8.2	85355
24 V DC/20 A	127x174x214/12.8	85356

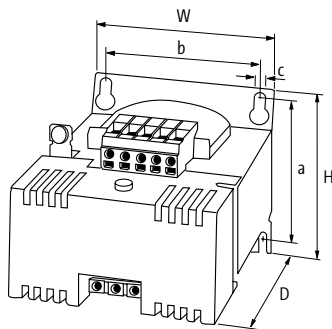
Accessories	Art-No.
Automotive fuses FKS (20 A)	90407

Input	
Input voltage	115/230 V AC \pm 10 V AC
Frequency	50/60 Hz

Output	
Output voltage	24 V DC (SELV)
Ripple	max. 5 % rms
Output filter	LED, VDR and smoothing capacitor

General data	
Standards	(EN 61558-2-6), (EN 62041 category I), (EN 55011 B), (EN 61000-3-2)
Temperature range	-20...+60 °C, no condensation
Mounting method	Key-hole mounting

Dimension drawing



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes

RECTIFIED POWER SUPPLIES

1-/2-phase

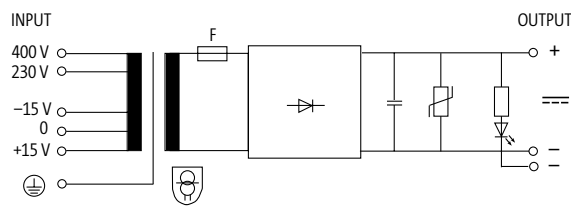
MEN
INPUT: 230/400 V AC

MEN
INPUT: 230/400 V AC
with DIN-rail adapter



Approvals:

Circuit diagram

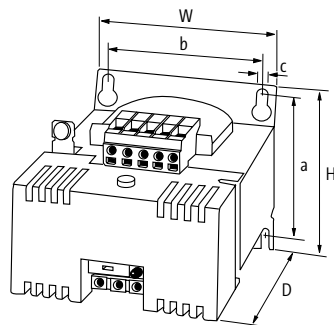


Order Data	H×W×D / kg	Art-No.	H×W×D / kg	Art-No.
24 V DC / 1 A	64×78×120 / 1.3	85349	64×78×120 / 1.3	8985349
24 V DC / 2.5 A	83×84×124 / 2.1	85350	83×84×124 / 2.1	8985350
24 V DC / 5 A	95×96×136 / 3.0	85351	95×96×136 / 3.0	8985351
24 V DC / 7.5 A	103×105×151 / 5.6	85357		

Accessories	Art-No.
Automotive fuses FKS (3 A)	90401
Automotive fuses FKS (5 A)	90403
Automotive fuses FKS (10 A)	90405
Automotive fuses FKS (15 A)	90406

Input	
Input voltage	230/400 ±15 V AC
Frequency	50/60 Hz
Output	
Output voltage	24 V DC (SELV)
Ripple	max. 5 % rms
Output filter	LED, VDR and smoothing capacitor
General data	
Standards	(EN 61558-2-6), (EN 62041 category I), (EN 55011 B), (EN 61000-3-2)
Temperature range	-20...+60 °C, no condensation
Mounting method	Key-hole mounting DIN-rail mountable TH35-15 (EN 60715) or for key-hole mounting

Dimension drawing



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes

RECTIFIED POWER SUPPLIES

1-/2-phase

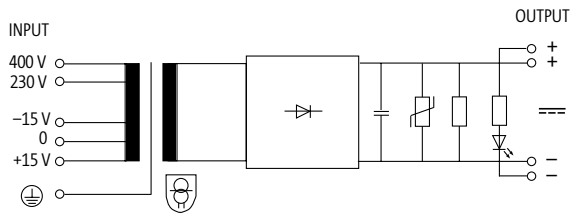
MEN

INPUT: 230/400 V AC



Approvals:  

Circuit diagram



Order Data	HxWxD/kg	Art-No.
24 V DC/10 A	113x120x160/6.0	85352
24 V DC/15 A	139x135x182/8.2	85353
24 V DC/20 A	127x174x214/12.8	85354

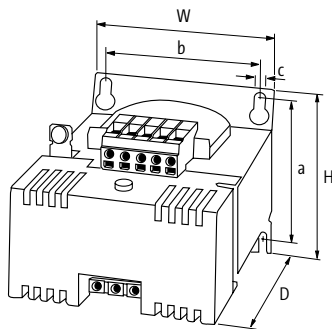
Accessories	Art-No.
Automotive fuses FKS (20 A)	90407

Input	
Input voltage	230/400 ±15 V AC
Frequency	50/60 Hz

Output	
Output voltage	24 V DC (SELV)
Ripple	max. 5 % rms
Output filter	LED, VDR and smoothing capacitor

General data	
Standards	(EN 61558-2-6), (EN 62041 category I), (EN 55011 B), (EN 61000-3-2)
Temperature range	-20...+60 °C, no condensation
Mounting method	Key-hole mounting

Dimension drawing



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes

RECTIFIED POWER SUPPLIES

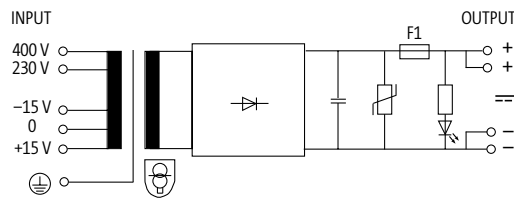
1-/2-phase

MTPS

INPUT: 230/400 V AC



Circuit diagram



Order Data	HxWxD/kg	Art-No.
24 V DC/0.5 A	108x87x124/1.3	85400
24 V DC/1 A	108x87x124/1.3	85401
24 V DC/2 A	108x87x142/2.0	85402
24 V DC/4 A	108x87x165/2.9	85403

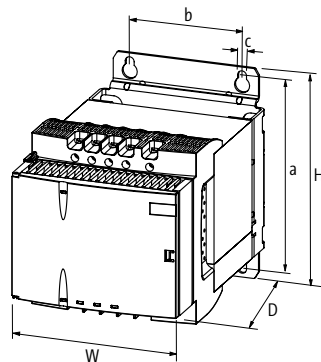
Accessories	Art-No.
Glass automotive fuse 0.5 A (T)	89650
Label plates for MTL/MTPS	89661
Glass automotive fuse 1 A (T)	89651
Glass automotive fuse 2 A (T)	89652
Glass automotive fuse 4 A (T)	89653

Input	
Input voltage	230/400 ±15 V AC
Frequency	50/60 Hz
LED display	LED (green) for input voltage

Output	
Output voltage	24 V DC (SELV)
Ripple	max. 5 % rms
Output filter	LED, VDR and smoothing capacitor

General data	
Standards	(EN 61558-2-6), (EN 62041 category I), (EN 55011 B), (EN 61000-3-2)
Temperature range	-20...+60 °C, no condensation
Mounting method	DIN-rail mountable TH35-15 (EN 60715) or for key-hole mounting

Dimension drawing



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes

RECTIFIED POWER SUPPLIES

1-/2-phase

MTPS

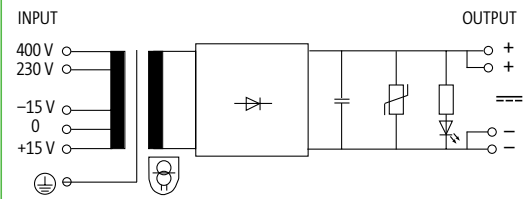
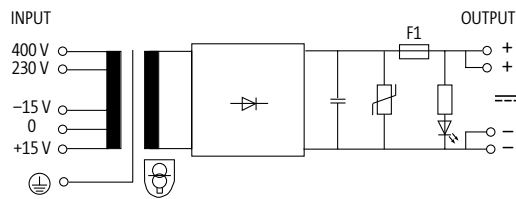
INPUT: 230/400 V AC



Approvals:  

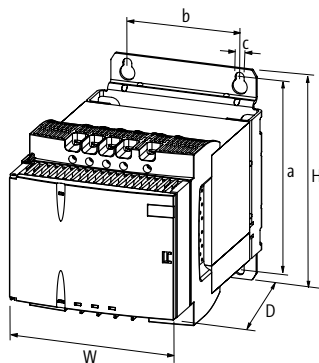


Circuit diagram



Order Data	HxWxD/kg	Art-No.	HxWxD/kg	Art-No.
24 V DC/6 A	153x123x153/4.9	85404		
24 V DC/10 A			153x123x185/7.7	85405
Accessories				Art-No.
Label plates for MTL/MTPS				89661

Input	
Input voltage	230/400 ±15 V AC
Frequency	50/60 Hz
LED display	LED (green) for input voltage
Output	
Output voltage	24 V DC (SELV)
Ripple	max. 5 % rms
Output filter	LED, VDR and smoothing capacitor
General data	
Standards	(EN 61558-2-6), (EN 62041 category I), (EN 55011 B), (EN 61000-3-2)
Temperature range	-20...+60 °C, no condensation
Mounting method	Key-hole mounting
Dimension drawing	



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes

RECTIFIED POWER SUPPLIES

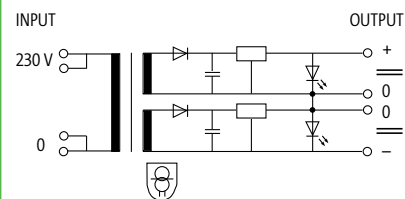
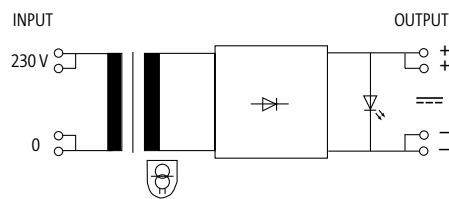
Single-phase, compact
– stable output voltage

MKN
INPUT: 230 V AC



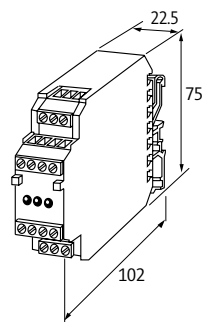
Approvals:

Circuit diagram



Order Data	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	
2 × 10 V DC/2 × 50 mA		85616
2 × 15 V DC/2 × 35 mA		85617

Input		
Input voltage	207...253 V AC	
Frequency	50/60 Hz	
Output		
Ripple	max. 10 mV p-p	
Output filter	VDR and smoothing capacitor	LED, VDR and smoothing capacitor
Short-circuit and overload protection	yes	
LED display	LED (green): in operation	
General data		
Standards	(EN 61558-2-6), (EN 62041 category II), (EN 55011 B), (EN 61000-3-2)	
Temperature range	0...+60 °C, no condensation	
Mounting method	DIN-rail mountable TH35 or G32 (EN 60715)	
Dimension drawing		



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes

RECTIFIED POWER SUPPLIES

3-phase

MPL

INPUT: 3 × 400 V AC, ±5% reconnectable



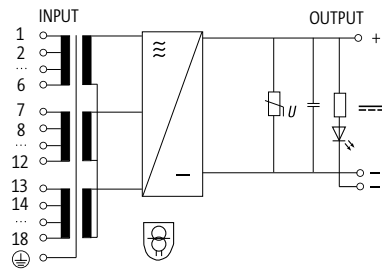
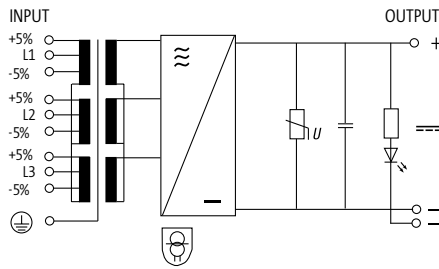
MPL Multi

INPUT: 3 × 208...520 V AC



Approvals:  Listed

Circuit diagram

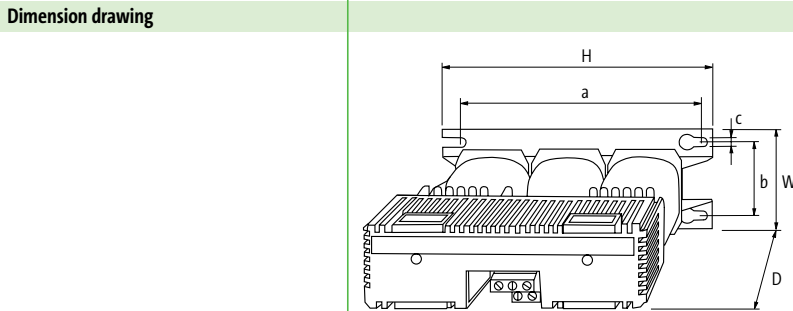


Order Data	H×W×D/kg	Art-No.	H×W×D/kg	Art-No.
24 V DC/5 A	125×73×153/2.9 – cURus	85921		
24 V DC/7.5 A	185×78×188/4.4 – cURus	85923		
24 V DC/10 A	185×78×188/4.5 – cURus	85925	185×93×188/6.6	85953
24 V DC/15 A	220×82×208/8.2 – cURus	85927	220×82×208/7.5	85954
24 V DC/20 A	220×103×213/10.5 – cURus	85929		
24 V DC/25 A	220×103×213/11.0 – cURus	85931	220×103×213/11.1	85955
24 V DC/30 A	240×107×250/13.5 – cURus	85933		
24 V DC/40 A	280×124×313/17.8 – cURus	85935	280×124×313/17.9	85956
24 V DC/50 A	280×134×313/20.9 – cURus	85937	280×134×313/20.9	85957
24 V DC/60 A	280×154×313/26.1 – cURus	85939		

Input		
Input voltage	3 × 400 V AC ±5 %	3 × 208...520 V AC
Frequency	50/60 Hz	

Output	
Output voltage	24 V DC (SELV)
Ripple	max. 2 % rms
Output filter	LED, VDR and smoothing capacitor

General data	
Standards	(EN 61558-2-6), (EN 62041 category I), (EN 55011 B), (EN 61000-3-2)
Temperature range	-20...+55 °C, for any mounting position at vertical wall, no condensation
Mounting method	Key-hole mounting



Murrelektronik Online Shop
onlineshop.murrelektronik.com/en

Notes