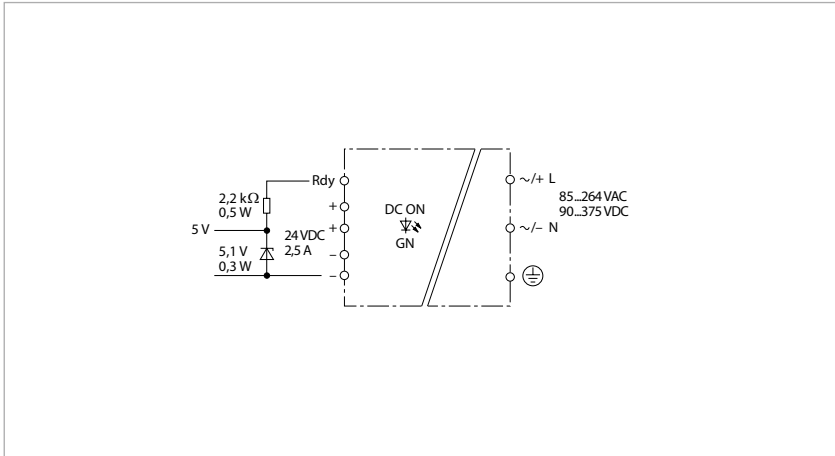


# Power supply



## Features

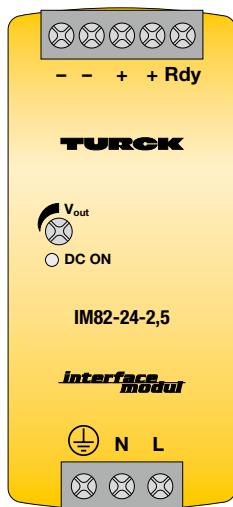
- Safety extra-low voltage SELV IEC/ EN 60950
- Output voltage adjustable 24...28 VDC
- Nominal current 2.5 A
- Single/parallel operating mode
- Surge protection
- Mains buffering up to 30 ms
- Power-good relay

The IM82-24-2.5 power supply units are designed for DC loads, particularly the switching and monitoring devices of the TURCK IM, IME, IMS and IMC interface module series.

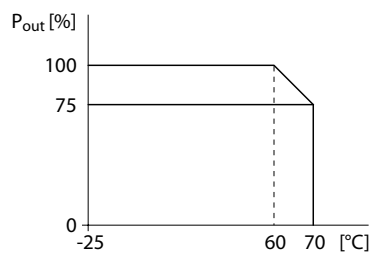
The power supply provides 24 VDC output voltage and 2.5 A output current. The output voltage is adjusted in a range between 24...28 VDC with the potentiometer  $V_{out}$ . The device provides safety ex-

tra-low voltage (SELV) according to EN 60950.

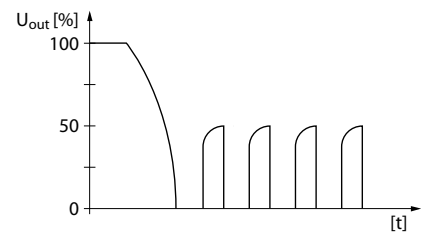
The power supply can be set to single or parallel operating mode (with decoupling diode).



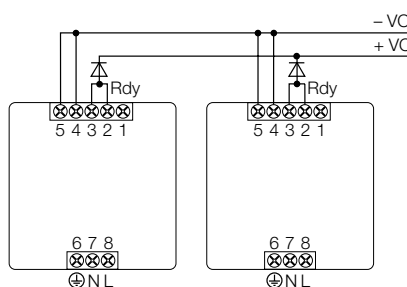
## Derating



## Short-circuit behaviour



## Parallel operation



# Technical data

<b>Type</b>	IM82-24-2,5
Ident no.	7545041

## Power supply

Nominal voltage	Universal voltage supply unit
Operating voltage range	90...370 VDC
Operating voltage range	85...264 VAC
Frequency	47...63 Hz
Power consumption	≤ 83 VA
Efficiency	89 %
Internal fuse	T 2 A / 250 VAC
inrush current	U <sub>i</sub> = 115 VAC, 20 A; U <sub>i</sub> = 230 VAC, 40 A
Mains buffering	U <sub>i</sub> = 115 VAC, 20 ms; U <sub>i</sub> = 230 VAC, 30 ms

## Outputs

Nominal output voltage	24 V
Nominal current	2.5 A
Output circuits (digital)	1 x transistor (potential-free, short-circuit proof), > 18.8...19.6 V
Switching voltage	≤ 24 VDC
Switching current per output	≤ 35 mA
Surge limiting	125-138 %
Overload protection	110-150 %
Parallel mode	yes, via diodes
Pollution degree	2
Surge category	II
Short-circuit behaviour	Hiccup mode

## Response characteristic

Limit frequency	≤ 80000 Hz
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## Indication

Operational readiness	green
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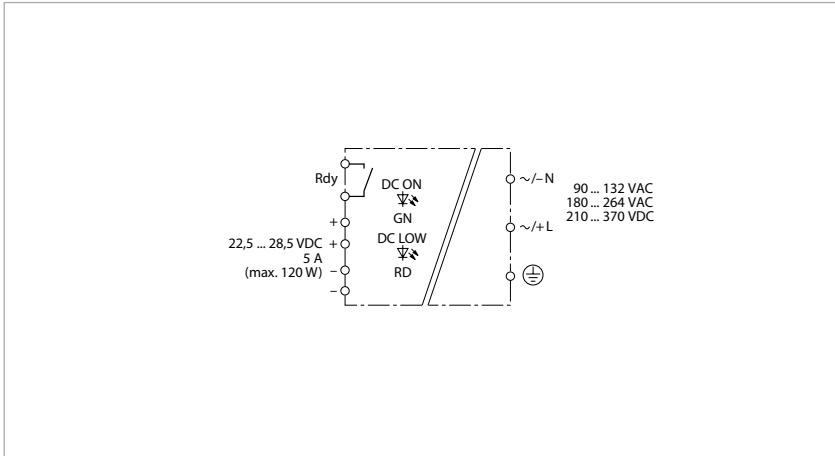
## Environmental Conditions

Ambient temperature	-25...+70 °C
Storage temperature	-25...+85 °C
Relative humidity	≤ 95 %
Derating	-2.5%/°C from 60 °C
Test voltage	3.0 kV

## Mechanical data

Tightening torque	0.5 Nm
Electrical connection	screw terminals
Terminal cross-section	0.2...2.0 mm <sup>2</sup>
Housing material	plastic
Mounting instruction	for DIN rail
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	40.5 x 90 x 114 mm

# Power supply



## Features

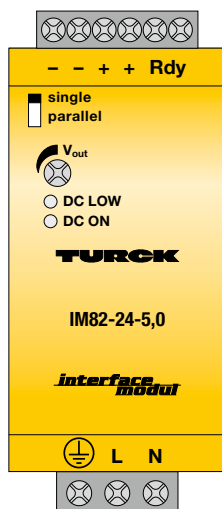
- UL Class 1, Div 2
- Safety extra-low voltage SELV IEC/EN 60950
- SEMI-F47
- Output voltage adjustable 22.5...28.5 VDC
- Nominal current 5 A
- Single/parallel operating mode
- Surge protection
- Removable terminals
- Mains buffering up to 30 ms
- Power-good relay

The IM82-24-5.0 power supply units are designed for DC loads, particularly the switching and monitoring devices of the TURCK IM, IME, IMS and IMC interface module series.

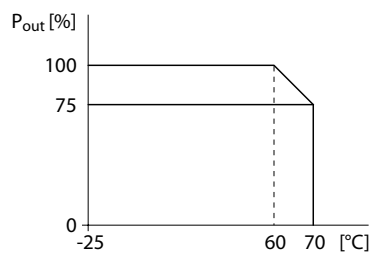
The power supply provides 24 VDC output voltage and 5.0 A output current. The output voltage is adjusted in a range between 22.5...28.5 VDC with the potentiometer  $V_{out}$ . The device provides safety

extra-low voltage (SELV) according to EN 60950.

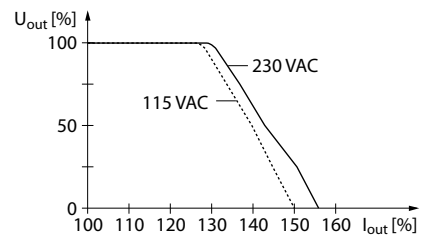
The power supply can be set to single or parallel operating mode.



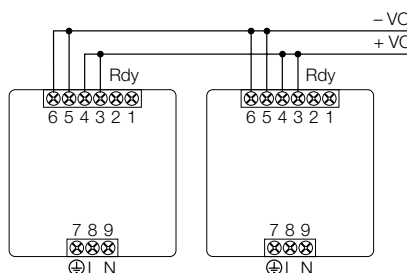
## Derating



## Short-circuit behaviour



## Parallel operation



## Technical data

<b>Type</b>	IM82-24-5,0	Protection class	IP20
Ident no.	7545042	Flammability class acc. to UL 94	V-0
		Dimensions	64 x 143.5 x 116.6 mm

### Power supply

Nominal voltage	Universal voltage supply unit
Operating voltage range	210...370 VDC
Operating voltage range	90...132 VAC
Operating voltage range	186...264 VAC
Frequency	47...73 Hz
Power consumption	≤ 145 VA
PFC	0.7
Efficiency	86 %
Internal fuse	T 3.15 A / 250 VAC
inrush current	U <sub>i</sub> = 115 VAC, 24 A; U <sub>i</sub> = 230 VAC, 48 A
Mains buffering	U <sub>i</sub> = 115 VAC, 25 ms; U <sub>i</sub> = 230 VAC, 30 ms

### Approval | Certification

UL<sub>us</sub>

### Outputs

Nominal output voltage	24 V
Nominal current	5 A
Output circuits (digital)	relay (NO), > 17.6...19.4 V
Relay switching voltage	≤ 60 VDC
Switching current per output	≤ 300 mA
Surge limiting	125-145 %
Overload protection	105-145 %
Parallel mode	yes, switchover initiated by a switch, max. 3 devices each with 90 % load current
Pollution degree	2
Surge category	II
Short-circuit behaviour	Current limiting

### Response characteristic

Limit frequency	≤ 80000 Hz
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### Indication

Operational readiness	green
Error indication	red

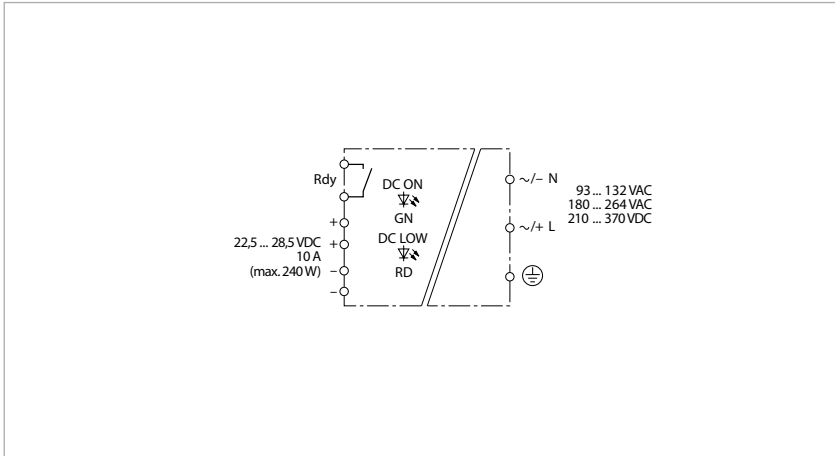
### Environmental Conditions

Ambient temperature	-25...+70 °C
Storage temperature	-25...+85 °C
Relative humidity	≤ 95 %
Derating	-2.5%/°C from 60 °C
Test voltage	3.0 kV

### Mechanical data

Tightening torque	0.5 Nm
Electrical connection	screw terminals
Terminal cross-section	0.2...2.0 mm <sup>2</sup>
Housing material	metal
Mounting instruction	for DIN rail

# Power supply



## Features

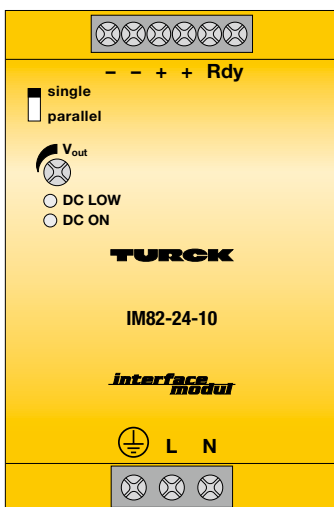
- UL Class 1, Div 2
- Safety extra-low voltage SELV IEC/EN 60950
- SEMI-F47
- Output voltage adjustable 22.5...28.5 VDC
- Nominal current 10 A
- Single/parallel operating mode
- Surge protection
- Mains buffering up to 30 ms
- Power-good relay

The IM82-24-10 power supply units are designed for DC loads, particularly the switching and monitoring devices of the TURCK IM, IME, IMS and IMC interface module series.

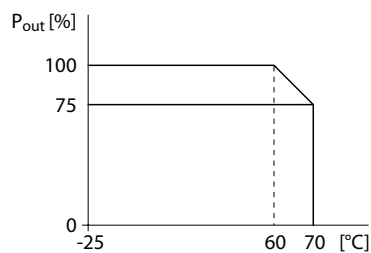
The power supply provides 24 VDC output voltage and 10 A output current. The output voltage is adjusted in a range between 22.5...28.5 VDC with the potentiometer  $V_{out}$ . The device provides safety

extra-low voltage (SELV) according to EN 60950.

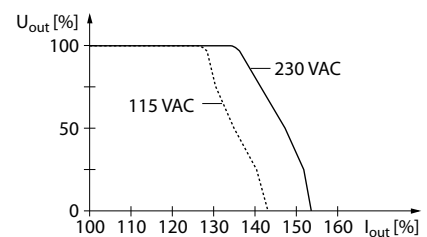
The power supply can be set to single or parallel operating mode.



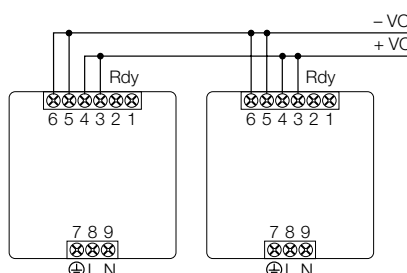
## Derating



## Short-circuit behaviour



## Parallel operation



## Technical data

<b>Type</b>	IM82-24-10
Ident no.	7545043

### Power supply

Nominal voltage	Universal voltage supply unit
Operating voltage range	210...370 VDC
Operating voltage range	90...132 VAC
Operating voltage range	186...264 VAC
Frequency	47...73 Hz
Power consumption	≤ 276 VA
PFC	0.7
Efficiency	89 %
Internal fuse	T 6.3 A / 250 VAC
inrush current	U <sub>i</sub> = 115 VAC, 30 A; U <sub>i</sub> = 230 VAC, 60 A
Mains buffering	U <sub>i</sub> = 115 VAC, 25 ms; U <sub>i</sub> = 230 VAC, 30 ms

### Outputs

Nominal output voltage	24 V
Nominal current	10 A
Output circuits (digital)	relay (NO), > 17.6...19.4 V
Relay switching voltage	≤ 60 VDC
Switching current per output	≤ 300 mA
Surge limiting	120-145 %
Overload protection	110-150 %
Parallel mode	yes, switchover initiated by a switch, max. 3 devices each with 90 % load current
Pollution degree	2
Surge category	II
Short-circuit behaviour	Current limiting

### Response characteristic

Limit frequency	≤ 40000 Hz
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### Indication

Operational readiness	green
Error indication	red

### Environmental Conditions

Ambient temperature	-25...+70 °C
Storage temperature	-25...+85 °C
Relative humidity	≤ 95 %
Derating	-2.5%/°C from 60 °C
Test voltage	3.0 kV

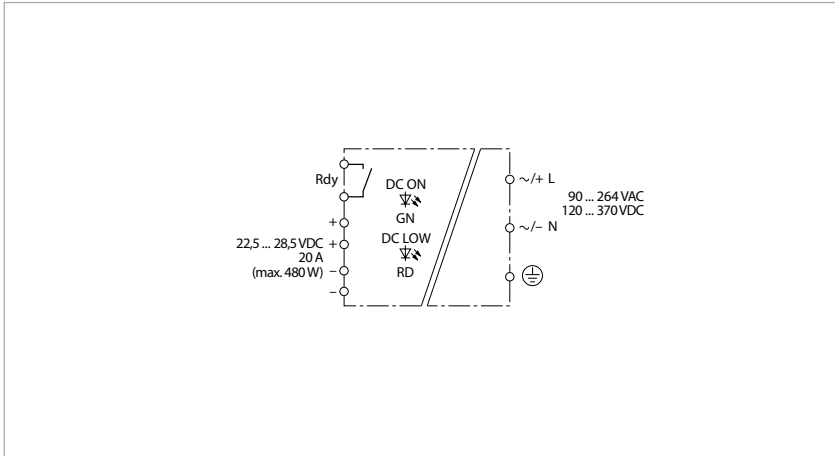
### Mechanical data

Tightening torque	0.5 Nm
Electrical connection	screw terminals
Terminal cross-section	0.2...2.0 mm <sup>2</sup>
Housing material	metal

Mounting instruction	for DIN rail
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	83.5 x 124.5 x 116.6 mm

<b>Approval   Certification</b>	UL <sub>us</sub>
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# Power supply



## Features

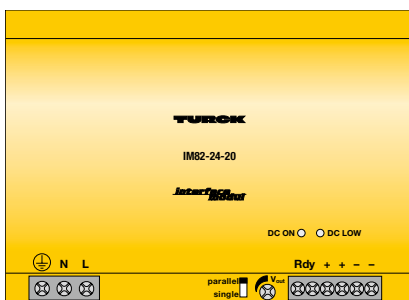
- UL Class 1, Div 2
- Safety extra-low voltage SELV IEC/EN 60950
- SEMI-F47
- Output voltage adjustable 22.5...28.5 VDC
- Nominal current 20 A
- Single/parallel operating mode
- Surge protection
- Mains buffering up to 30 ms
- Parallel operation
- Power-good relay

The IM82-24-20 power supply units are designed for DC loads, particularly the switching and monitoring devices of the TURCK IM, IME, IMS and IMC interface module series.

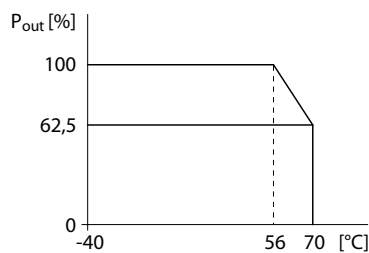
The power supply provides 24 VDC output voltage and 20 A output current. The output voltage is adjusted in a range between 22.5...28.5 VDC with the potentiometer  $V_{out}$ . The device provides safety

extra-low voltage (SELV) according to EN 60950.

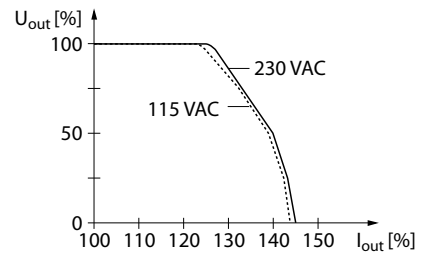
The power supply can be set to single or parallel operating mode.



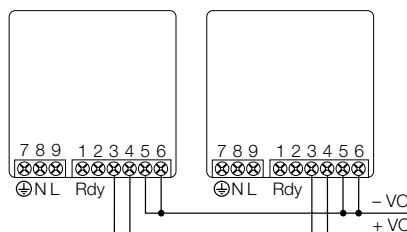
## Derating



## Short-circuit behaviour



## Parallel operation



## Technical data

<b>Type</b>	IM82-24-20
Ident no.	7545044

Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	175.5 x 124.5 x 116.6 mm

### Power supply

Nominal voltage	Universal voltage supply unit
Operating voltage range	120...370 VDC
Operating voltage range	90...264 VAC
Frequency	47...63 Hz
Power consumption	≤ 564 VA
PFC	0.99
Efficiency	89 %
Internal fuse	T 10 A / 250 VAC
inrush current	U <sub>i</sub> = 115 VAC, 25 A; U <sub>i</sub> = 230 VAC, 50 A
Mains buffering	U <sub>i</sub> = 115 VAC, 30 ms; U <sub>i</sub> = 230 VAC, 30 ms

<b>Approval   Certification</b>	UL <sub>us</sub>
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### Outputs

Nominal output voltage	24 V
Nominal current	20 A
Output circuits (digital)	relay (NO), > 17.6... 19.4 V
Relay switching voltage	≤ 60 VDC
Switching current per output	≤ 300 mA
Surge limiting	125-137 %
Overload protection	120-140 %
Parallel mode	yes, switchover initiated by a switch, max. 3 devices each with 90 % load current
Pollution degree	2
Surge category	II
Short-circuit behaviour	Current limiting

### Response characteristic

Limit frequency	≤ 60000 Hz
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### Indication

Operational readiness	green
Error indication	red

### Environmental Conditions

Ambient temperature	-25...+70 °C
Storage temperature	-25...+85 °C
Relative humidity	≤ 95 %
Derating	4%/°C from 61 °C
Test voltage	3.0 kV

### Mechanical data

Tightening torque	0.6 Nm
Electrical connection	screw terminals
Terminal cross-section	0.2... 6.0 mm <sup>2</sup>
Housing material	metal
Mounting instruction	for DIN rail