

Power Supply Unit
IP 5592, IR 5592



- According to IEC 60 664-1, IEC/EN 60 742
- Available with 1 output DC24V up to 500 mA or 2 outputs with max. 200mA and 400 mA, galvanically separated
- Short circuit and overload protection
- As option to VDE 0107 for medically used rooms
- IP 5592: width 70 mm
 IR 5592: width 105 mm

Approvals and Marking



Application

For supplying 24 V DC voltage.

Function

The mains supply units provide unregulated DC voltage of 24 V at the output. A special circuit limits the output voltage to a maximum of DC 24 V + 15% if there is input overvoltage and/or no-load operation or low loads at the output.

Indicators

upper LED: on, when U_{S1} resp. U_{S+} is available
 lower LED: on, when U_{S2} is available, only IR 5592

Technical Data

Primary voltage:	AC 230 V \pm 20 %
Primary current at nominal voltage:	
a) no-load operation:	
IP 5592:	25 mA
IR 5592:	40 mA
b) secondary load 350 mA:	
IP 5592:	70 mA
c) secondary load 500 mA:	
IR 5592:	95 mA
d) secondary load 600 mA:	
IR 5592:	110 mA
Secondary voltage:	DC 24 V \pm 15 %
	The output voltage is available on 2 pairs of terminals.
	With IP 5592 on terminals U_{S+} and U_{S-} .
	With IR 5592/001 on terminals U_{S1}
	These are connected internally in parallel.
Secondary current	
IP 5592:	350 mA
IR 5592/001:	Output U_{S1} 500 mA
IR 5592/002 and IR 5592/003:	Output U_{S1} 200 mA
	Output U_{S2} 400 mA
	Iges: ($U_{S1} + U_{S2}$)
	500 mA at $T_u > 40^\circ\text{C}$
	600 mA at $T_u - 20 \dots 40^\circ\text{C}$
Secondary current, versions /002 und /003:	
	Output U_{S1} 200 mA
	Output U_{S2} 400 mA
	$I_{\text{total}}: (U_{S1} + U_{S2})$
	500 mA at $T_u > 40^\circ\text{C}$
	600 mA at $T_u - 20 \dots 40^\circ\text{C}$
Ripple at maximum load:	$\leq 10 \%$
Current limitation:	Short circuit and overload protection by means of PTC resistor (primary side)

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60°C	
Insulating strength:	4 kV, 50 Hz, 1min.	
Clearance and creepage distances		
rated impuls voltage / pollution degree:	6 kV / 2	IEC 60 664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF-irradiation:	10 V / m	IEC/EN 61 000-4-3
Fast transients:	4 kV	IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
HF-wire guided:	10 V	IEC/EN 61 000-4-6
Interference suppression:	Limit value class B	EN 55 011
Degree of protection		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
Housing:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm frequency 10 ... 55 Hz IEC/EN 60 068-2-6 20 / 060 / 04 IEC/EN 60 068-1 EN 50 005	
Climate resistance:		
Terminal designation:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² stranded ferruled DIN 46 228-1/-2/-3/-4	
Wire connection:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1 DIN rail IEC/EN 60 715	
Wire fixing:		
Mounting:		
Weight:		
IP 5592:	490 g	
IR 5592:	630 g	

Dimensions

Width x height x depth:	
IP 5592:	70 x 90 x 59 mm
IR 5592:	105 x 90 x 59 mm

Standard Type

IR 5592/003	AC 230 V 50 / 60 Hz
Article number:	0041650
• 2 secondary voltages, galvanic separated	
• Primary nominal voltage U_N :	AC 230 V
• Width:	105 mm

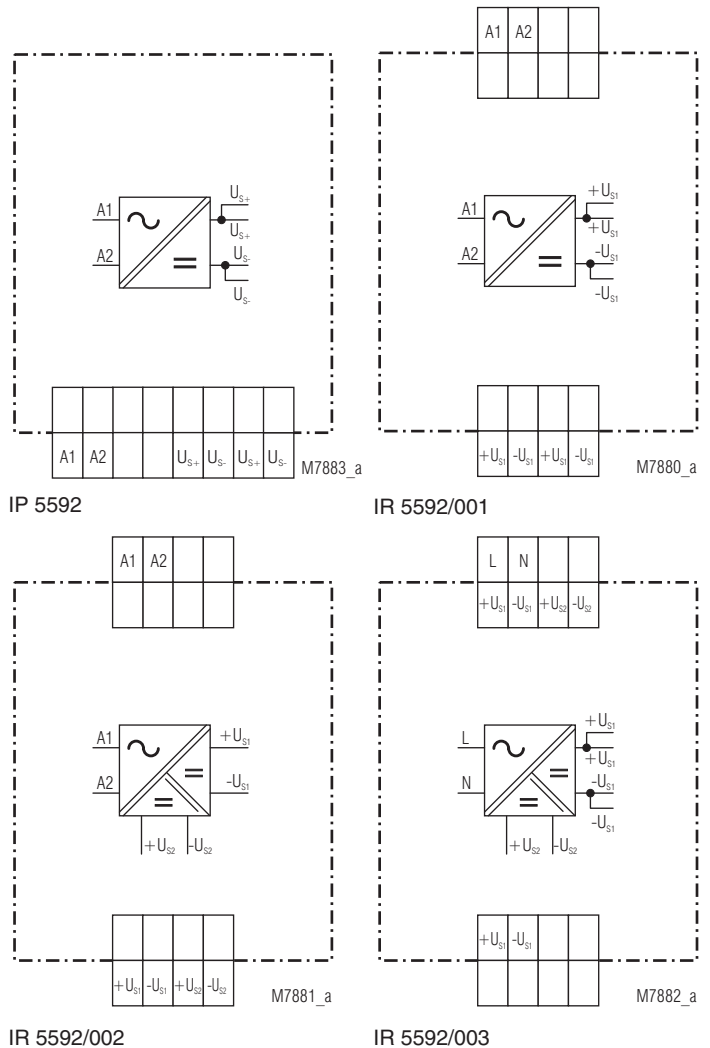
Variants

IP 5592/107:	for switch-over circuit acc. to VDE 0107
IR 5592/001:	1 secondary voltage
IR 5592/002:	as IR 5592/003 but with different terminal arrangement (see diagram)

Ordering example for variants

IR 5592 / _ _ _	Variant
_____	Type

Circuit Diagrams



To be used with
DOLD 2-wire modul IL 5512 and
DOLD-input module IL/IP 5513:
 U_{S1} : Supply voltage for inputs
IL/IP 5513
 U_{S2} : for IL 5512 and supply
voltage for IL/IP 5513