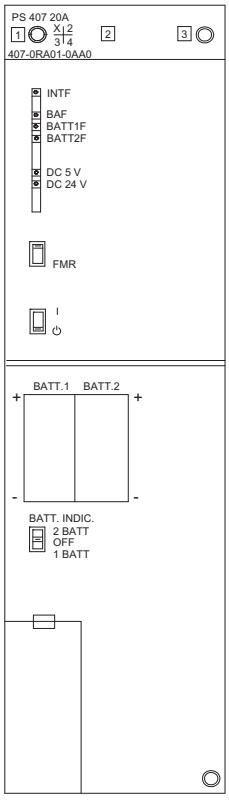
3.10 Power supply module PS 407 20A (6ES7407-0RA01-0AA0)

Function

The power module PS 407 20A is designed for connection to an 85-264 V AC network or an 88-300 V DC network, and supply 5 V/20 A DC and 24 V/1 A DC at the secondary side.

PS 407 20A operator control and monitoring elements



Mounting screw

LEDs INTF, BAF,
BATT1F, BATT2F, 5 V
DC, 24 V DC

FMR button (Failure Message Reset)

Standby switch (does not cut off mains)

Under cover

Battery compartment

Switch BATT. INDIC,
2 BATT, OFF, 1 BATT

3-pin power connector

Mounting screw

Figure 3-6 PS 407 20 A operator control and monitoring elements

Mains connection

An AC power plug is used with PS 407 20A both for connection to an AC network and for connection to a DC network.

Reverse polarity of L+ and L-

Reverse polarity of L+ and L with a supply voltage of 88 V DC to 300 V DC does not affect the function of the power supply. The connection must comply with the instructions in the installation manual.

PS 407 20A technical specifications

Dimensions, weight and cable cross-sections	
Dimensions W x H x D (mm) Weight Cable cross-section	75x290x217 2.2 kg 3x1.5 mm^2 (stranded wire with wire end ferrule with insulating sleeve; use hose line only)
Cable diameter	3 to 9 mm
Input variables	
Input voltage	
• Rated value	110/230 V DC 120/230 V AC
• Permitted range	88 to 300 V DC 85 to 264 V AC (wide range input)
Line frequency	
• Rated value	50/60 Hz
• Permitted range	47 to 63 Hz
Rated input current	
• At 120 V AC/110 V DC	1.5 A
• At 230 V AC/230 V DC	0.8 A
Inrush current	Peak value 88 A full width at half maximum 1.1 ms
Leakage current	< 3.5 mA
Output variables	
Output voltage	
• Rated values	5.1 V DC/24 V DC
Output current	
• Rated values	5 V DC: 20 A 24 V DC: 1.0 A
Parameters	
Protection class pursuant to IEC 60536	I, with protective conductor
Overvoltage category	II
Pollution degree	2
Rated voltage U_e $0 < U_e \leq 50$ V 150 V $< U_e \leq 300$ V	Test voltage 700 V DC (secondary <-> PE) 2200 V DC (primary <-> secondary/PE)
Backup for power failures	> 20 ms at a repeat rate of 1 s, meets NAMUR recommendation NE 21
Power consumption	168 W
Power loss	44 W
Backup current	maximum of 100 µA when power off
Back-up batteries (option)	2 x lithium AA, 3.6 V/2.3 Ah
Protective separation in accordance with IEC 61131-2	Yes