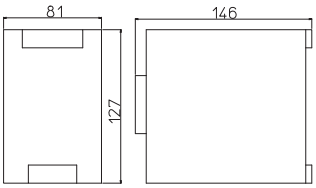
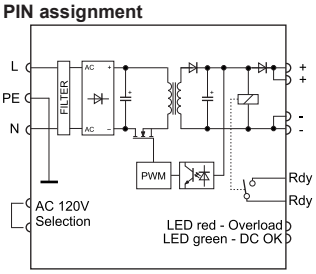
Power supply · regulated, 480 W

Primary switchmode power supply, PFC, Single-phase
Input: AC 90–132 V, AC 187–264 V
Output: 24 V, adjustable

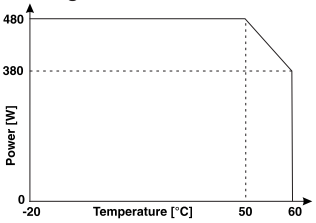
Dimensions



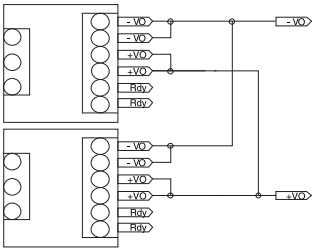
PIN assignment



Derating



Parallel/redundant mode



Description		Part-No.	Type	PU
Screw terminal				
Output voltage/current	DC 24 V/ 20 A	722986	CPSB1-480-24R	1
	DC 48 V/ 10 A	722989	CPSB1-480-48R	1

Input	**CPSB1-480-24R**	**CPSB1-480-48R**
Nominal voltage	AC 120 V / AC 240 V	
Operation voltage range	AC 90–132 V / AC 187–264 V	
Line frequency	47 – 63 Hz	
Rated current	U_i= AC 120 V: 6 A / U_i= AC 230 V: 3.5 A	
Inrush current	<35 A	
Internal fuse	–	
External fuse	Automatic: C 16 A (required)	
Power Factor Correction P.F.C.	>0.6	
Output		
Rated voltage output	DC 24 V	DC 48 V
Rated current output	20 A	10 A
Max. output current	30 A, 5 s, @ 24 V	15 A, 5 s, @ 48 V
Short-circuit current	>55 A, 5 s	>40 A, 5 s
Voltage trim range	23/28 V	45/55 V
Accuracy	–	
Line regulation	–	
Load regulation	<1 %	
Rise time	–	
Temperature coefficient	–	
Ripple & Noise	100 mV pp	
Hold up time	>35 ms (AC 240 V)	
Status indication DC ON LED green	≥21.6 V	≥43.2 V
Status indication DC LOW LED red	≤21.6 V	≤43.2 V
Parallel/redundant operation	max. 2 devices / via internal diodes	
Efficiency	>92 % (AC 240 V)	
Low power loss	45 A (AC 230 V)	
Rated over load protection	yes	
Over voltage protection	yes	
Short circuit characteristics	Hiccup-mode	
General		
Switching frequency	approx. 70 – 110 kHz	
Insulation voltage input/output	AC 3.0 kV_{eff}	
Insulation voltage input / ground	AC 2.0 kV_{eff}	
Insulation voltage output / ground	AC 0.7 kV_{eff}	
Insulation resistance at DC 500 V	– MΩ	
Operation temperature range	-20 °C – 60 °C (derating)	
Derating	>50°C: -10 W / °C	
Storage temperature range	-25 °C – 85 °C	
M.T.B.F.	750000 h to SN29500 / 250000 h to MIL Standard HDBK 217F	
Relative humidity	20–90% RH, non-condensing	
Dimensions (w × h × d) in mm	81.0 × 127.0 × 146.0	
Cooling	Natural air cooling, 10 mm distance right/left, 50 mm distance above/below	
Housing material	Aluminium	
Field installation	rail TS 35 (EN 50022)	
Application height	– m	
Installation postition	vertical	
Protection class	IP 20 (IEC529, EN60529)	
IP rating	I (SELV, PELV)	
Overvoltage category	II	
Pollution degree	2	
Weight (kg/piece)	1.100	
Termination	Screw terminal: 0.2–6.0 mm^2,max. 0.62 Nm	
Approvals	UL, cUL: UL 508, IEC 950, EN 60950 CE: EN 61000-4-2/3/4/5/6/11, EN 61000-6-2, EN 601000-6-4, EN 50178, EN 61558, EN 50081-1, EN 50082-2, EN 55022 Class B	
Monitoring		
DC ON Control (Rdy)	Normally open	
Switching voltage	AC 300 V / DC 150 V	
Switching current	AC/DC 1 A	
Switching capacity	300 VA / 30 W	
Insulation voltage	AC 500 V	

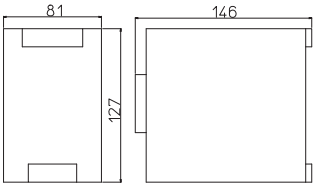
Power supply · regulated, 480 W, 3-phase

Primary switchmode power supply, PFC, 3-phase
Input: Wide range input AC 340 - 550 V
Output: 24 V, adjustable

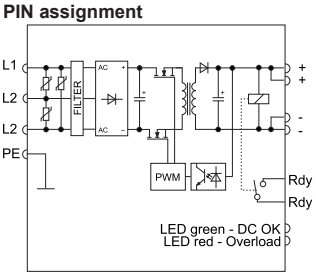
Description		Part-No.	Type	PU
Screw terminal				
Output voltage/current	DC 24 V/ 20 A	722800	CPSB3-500-24	1

Input	**CPSB3-500-24**
Nominal voltage	3× AC 400–500 V
Operation voltage range	3× AC 340–550 V
Line frequency	47 – 63 Hz
Rated current	U_i= AC 400 V: 1.3 A / U_i= AC 500 V: 1.1 A
Inrush current	<10 A
Internal fuse	–
External fuse	Automatic: 3 × B 16 A, C 10 A (required)
Power Factor Correction P.F.C.	>0.6
Output	
Rated voltage output	DC 24 V
Rated current output	20 A
Max. output current	30 A, 5 s, @ 24 V
Short-circuit current	>55 A, 5 s
Voltage trim range	24/28 V
Accuracy	–
Line regulation	–
Load regulation	<1 %
Rise time	–
Temperature coefficient	–
Ripple & Noise	100 mV pp
Hold up time	>15 ms (AC 400 V)
Status indication DC ON LED green	≥21.6 V
Status indication DC LOW LED red	≤21.6 V
Parallel/redundant operation	max. 2 devices / via external diodes
Efficiency	>94 % (AC 400 V)
Low power loss	30 A (AC 380 V)
Rated over load protection	yes
Over voltage protection	yes
Short circuit characteristics	Hiccup-mode
General	
Switching frequency	approx. 70 – 110 kHz
Insulation voltage input/output	AC 3.0 kV_{eff}
Insulation voltage input / ground	AC 2.0 kV_{eff}
Insulation voltage output / ground	AC 0.5 kV_{eff}
Insulation resistance at DC 500 V	– MΩ
Operation temperature range	-20 °C – 60 °C (derating)
Derating	>50°C: -10 W / °C
Storage temperature range	-25 °C – 85 °C
M.T.B.F.	>500000 h to SN29500 / >150000 h to MIL standard HDBK 217F
Relative humidity	20–90% RH, non-condensing
Dimensions (w × h × d) in mm	81.0 × 127.0 × 146.0
Cooling	Natural air cooling, 10 mm distance right/left, 50 mm distance above/below
Housing material	Aluminium
Field installation	rail TS 35 (EN 50022)
Application height	– m
Installation postition	vertical
Protection class	IP 20 (IEC529, EN60529)
IP rating	I (SELV, PELV)
Overvoltage category	II
Pollution degree	2
Weight (kg/piece)	1.200
Termination	Screw terminal: 0.2–6.0 mm^2,max. 0.62 Nm
Approvals	UL, cUL: UL 508, IEC 950, EN 60950 CE: EN 61000-4-2/3/4/5/6/11, EN 61000-6-2, EN 601000-6-4, EN 50178, EN 61558, EN 50081-1, EN 50082-2, EN 55022 Class B
Monitoring	
DC ON Control (Rdy)	Normally open
Switching voltage	AC 300 V / DC 150 V
Switching current	AC/DC 1 A
Switching capacity	300 VA / 30 W
Insulation voltage	AC 500 V

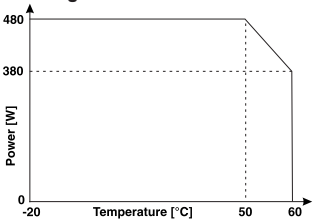
Dimensions



PIN assignment



Derating



Redundant operation