



The PRS6000 series is a range of very efficient power supplies for 3 phase mains input voltages.

Due to the high efficiency the units have a very high reliability and lifetime.

The PRS6000 60V has a very low output ripple voltage of typical 500uVrms and can be used in sensitive applications.

Due to the softswitching technology the EMC performance is excellent.

PRS600060 Specifications

Catalog number: 4022 430 10311	
Input	
Nominal voltage	400Vac 3 phase
- AC range	342...457Vac
- P.F typ.	0.85
- Frequency	47- 63Hz
Nominal current	11,3Arms
- Inrush current max.	< 25A
Efficiency typ.	96%
- Losses typ.	250W
Output	
Nominal voltage	60Vdc
-Tolerance overall	2%
- Ripple p-p (Bw=20Mhz)	20mVpp
- Ripple rms (Bw=20Mhz)	5mV
- Adjustment range	59...61V (adjustable on front panel)
- Factory adjustment	60V
- Remote sense	Yes, up to 4V (2V / lead)
- Load regulation	< 0.1% (with sense)
- Line regulation	< 0.1% (with sense)
- Dynamic regulation (80% to 100% load)	< 1% (with sense)
Nominal current	100A
- Current limit	103A - 108A
- Short circuit current	103A - 108A
Holdup time	> 10ms
Front panel indicators	
Output voltage OK/Failure	Green/Red LED
Standby	Yellow LED (flashing if standby)
Remote control features	
Remote ON-OFF control	yes

Remote voltage sensing	yes
Auxiliary monitoring and alarm signals	
Output voltage OK	yes
Input AC phase loss fault	yes
Output DC fault	yes
Over temperature fault	yes
Output over current fault	yes
Output current monitor	yes
Output voltage monitor	yes
Auxiliary 5V power output	
Nominal voltage	5Vdc
Tolerance overall	+/- 5%
Nominal current	20mA
Auxiliary 12V power output	
Nominal voltage	12Vdc
Tolerance overall	+/- 5%
Nominal current	50mA

General	
EMC Emissions	EN50081-1, EN50081-2 Class B EN55011, EN55022, EN61000-3-2, EN61000-3-3, EN 61204-3
EMC Immunity	EN50082-1, EN50082-2 Level 4, EN61000-4-3 Level 3; EN61000-4-6 Level 3; EN61000-4-4 Level 4 input and level 3 output; EN61000-4-5 Isolation Class 4, EN61000-4-11, EN 61204-3
Power supply standards	EN 61204-3
Approvals	CE UL CSA CB
Temperature	Operating temperature: 0...50°C; derate power from 50..60°C 5 % / °C Storage temperature: -25...85°C
Humidity	Max. 95% non-condensing
Protection	Short circuit , overload, open circuit, over voltage protection at Vnom +15% to +20%
Protection class	Class 1 (IEC536), degree of protection: IP20 (VDE 0470, IEC529)
Safety	Outputs SELV, UL1950, EN60950
Audio levels	< 55dBA at 1m distance
Warranty	2 years from delivery date; parts and labour
Installation	
Input fusing	External 16A slow acting fuse or B-type circuit breaker is recommended; i _{2t} < 1000A ² sec
Output fusing	Outputs are capable of providing high currents for short periods of time. Fusing may only be required if overload or short circuit currents cannot be tolerated for wires or loads.
Mounting	19 inch rack mount
Connections	Auxiliary connector: 15p sub D, female Mains connector: 4 x screw connector (L1, L2, L3 and PE) Output 60V: 2 x M10 bolt (torque 40Nm) Sense connector: 2 x Screw connector
Case	19" rack 3HE
Cooling	Forced air ; Internal fans are speed controlled
Free space required	> 120 mm on both left and right side
H x W x D mm	19", 3HE, D=460mm (D=500mm including connectors)
H x W x D inches	19", 3HE, D=18,1" (D=19,7" including connectors)
Weight	21 kg

Connectors:**Auxiliary connector**

Type: SUB-D 15-pol, female

Pin	Signal	Description
1	GND	Signal ground; return of monitor outputs
2	IMON	Current monitor output
3	n.c.	
4	n.c.	
5	RSD	Remote shut down input, 5V → power supply switches on, 0V → power supply switches off
6	OVP	Over voltage protection output. 5V → no alarm
7	+12V	Output +12V, 50mA
8	GND	Signal ground; return of status outputs and supply outputs
9	+5V	Output +5V, 20mA
10	VMON	Voltage monitor output
11	n.c.	
12	OT	Over temperature output
13	LIM	Current limit output
14	DCS	DC voltage status
15	ACS	AC voltage status

Digital signals (RSD, OVP, LIM, DCS and ACS) are TTL compatible

Mains connector

Pin	Signal	Description
1	L1	Mains L1 line voltage
2	L2	Mains L2 line voltage
3	L3	Mains L3 line voltage
4	PE	Protective Earth

Output connections

Pin	Signal	Description
	60V+	+60Vdc 100A; M10 bolt connection, Torque 40nM
	60V-	Return 60V 100A; M10 bolt connection, Torque 40nM
	Sense+	Sense+ of 60V; screw connection for wiresmm ²
	Sense-	Sense- of 60V; screw connection for wiresmm ²