The proven types

Output currents 10 and 20 A

Power supply, type	**10 A**	**20 A**
Order No.	**6EP1 434-2BA00**	**6EP1 436-2BA00**
Input	Three-phase AC	Three-phase AC
Rated voltage $V_{in\ rated}$	**400 to 500 V 3 AC** wide-range input	**400 to 500 V 3 AC** wide-range input
Voltage range	360 to 550 V 3 AC (340 to 360 V for max. 2 s or at max. 0.9 x $I_{out\ rated}$)	360 to 550 V 3 AC (340 to 360 V for max. 2 s or at max. 0.9 x $I_{out\ rated}$)
Overvoltage strength	2.3 x $V_{inrated}$, 1.3 ms	2.3 x $V_{inrated}$, 1.3 ms
Mains buffering at $I_{out\ rated}$	> 6 ms at V_{in} = 360 V	> 3 ms at V_{in} = 360 V
Rated line frequency; range	50/60 Hz; 47 to 63 Hz	50/60 Hz; 47 to 63 Hz
Rated current$I_{in\ rated}$	0.65 A (at 400 V)	1.2 A (at 400 V)
Inrush current limitation (+25 °C)	< 25 A	< 25 A
I^2t	< 1.0 A^2s	< 1.0 A^2s
Integrated line-side fuse	none	none
Required fuse protection (IEC 898) in mains supply line	3-pole coupled circuit-breaker Char. C up to 25 A (recommendation: 6 A) or motor circuit-breaker 3RV1021-1DA10, setting 3 A	3-pole coupled circuit-breaker Char. C up to 25 A (recommendation: 6 A) or motor circuit-breaker 3RV1021-1DA10, setting 3 A
Output	Stabilized, floating direct voltage	Stabilized, floating direct voltage
Rated voltage $V_{out\ rated}$	**24 V DC**	**24 V DC**
Total tolerance	± 3 %	± 3 %
Residual ripple (clock frequency: approx. 50 kHz)	< 150 mV_{pp} (typ. 60 mV_{pp})	< 150 mV_{pp} (typ. 60 mV_{pp})
Spikes (bandwidth: 20 MHz)	< 240 mV_{pp} (typ. 120 mV_{pp})	< 240 mV_{pp} (typ. 120 mV_{pp})
Setting range	22.8 to 26.4 V [1)]	22.8 to 26.4 V [1)]
Status display	Green LED for 24 V O.K.	Green LED for 24 V O.K.
Power ON/OFF behavior	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)

Power supply, type	**10 A**	**20 A**
Starting delay/voltage rise	< 3 s/typ. 40 ms	< 3 s/typ. 40 ms
Rated current $I_{out\ rated}$	**10 A**	**20 A**
Current range		
• Up to +45 °C	0 to 10 A	0 to 20 A
• Up to +55 °C	0 to 10 A	0 to 20 A
Dyn. V/I with		
• Starting on short circuit	Constant current approx. 18 A	Constant current approx. 30 A
• Short-circuit in operation	Constant current approx. 18 A	Constant current approx. 30 A
Parallel connection for increased output	Yes, 2 [1)]	Yes, 2 [1)]
Efficiency		
Efficiency at $V_{out\ rated}$, $I_{out\ rated}$	Approx. 89 %	Approx. 89 %
Power loss at $V_{out\ rated}$, $I_{out\ rated}$	Approx. 30 W	Approx. 59 W
Control		
Dyn. mains compensation ($V_{in\ rated}$ ± 15 %)	< 1 % V_{out}	< 1 % V_{out}
Dyn. load compensation (I_{out}: 50/100/50 %)	± 2 % V_{out}	± 2 % V_{out}
Settling time		
• Load step from 50 to 100 %	< 2 ms	< 2 ms
• Load step from 100 to 50 %	< 2 ms	< 2 ms
Protection and monitoring		
Output overvoltage protection	Yes, acc. to EN 60950	Yes, acc. to EN 60950
Current limitation	typ. 10.5 to 13 A	typ. 21 to 26 A
Short-circuit protection	Stabilized current characteristic down to 0 V	Stabilized current characteristic down to 0 V
RMS sustained short-circuit current	< 20 A	< 30 A
Overload/short-circuit indicator	-	-
Safety		
Galvanic isolation primary/secondary	Yes, SELV output voltage V_{out} acc. to EN 60950	Yes, SELV output voltage V_{out} acc. to EN 60950

Power supply, type	**10 A**	**20 A**
Protective class	Class I	Class I
Discharge current	< 0.35 mA (550 V/60 Hz)	< 0.35 mA (550 V/60 Hz)
TÜV test	Yes; CB scheme	Yes; CB scheme
CE marking	Yes	Yes
UL/cUL (CSA) approval	Yes, cULus listed (UL 508, CSA 22.2 No. 14-M91), File E143289	Yes, cULus listed (UL 508, CSA 22.2 No. 14-M91), File E143289
FM approval	-	-
Appr. for use in marine vessels	-	-
Degree of protection (EN 60529)	IP20	IP20
EMC		
Interference emission	EN 55022 Class B	EN 55022 Class B
Line harmonics limitation	EN 61000-3-2	EN 61000-3-2
Interference immunity	EN 61000-6-2	EN 61000-6-2
Operating specifications		
Ambient temperature range	0 to +55 °C with natural convection	0 to +55 °C with natural convection
Transportation and storage temperature range	-25 to +85 °C	-25 to +85 °C
Humidity rating	Climatic class 3K3 acc. to EN 60721, no condensation	Climatic class 3K3 acc. to EN 60721, no condensation
Mechanical specifications		
Connections		
• Mains input L1, L2, L3, PE	One screw-type terminal each for 0.5 to 2.5 mm^2 single-core/finely stranded	One screw-type terminal each for 0.5 to 2.5 mm^2 single-core/finely stranded
• Output L+	1 screw-type terminal for 0.33 to 10 mm^2	1 screw-type terminal for 0.33 to 10 mm^2
• Output M	2 screw-type terminals for 0.33 to 10 mm^2	2 screw-type terminals for 0.33 to 10 mm^2
Dimensions (W x H x D) in mm	280 x 125 x 92	280 x 125 x 92
Weight approx.	2 kg	2 kg
Mounting	Snap-mounting on DIN rail EN 50022-35x15/7.5	Snap-mounting on DIN rail EN 50022-35 x 5/7.5
Accessories	Mounting bracket 90° (6EP1971-2BA00)	Mounting bracket 90° (6EP1971-2BA00)

1) Only permissible with ambient temperature from 0 to 45 °C.