

## Single- and two-phase, primary switched mode power supply **PC 2AC**



### General Data

Nominal input voltage: 200 - 500 Vac
Nominal output voltage: 24 Vdc
Nominal output current: 5 A - 10 A
Ambient temperature -25 °C to +70 °C
Protection index IP 20

### Advantages

Stabilised and adjustable output voltage
Fast tripping of conventional circuit breakers
DC OK signalling
Parallel operation
Push-in terminals
Robust DIN rail mounting
Resistant to transient overvoltages up to 4 kV
Optional with 50 % Power Boost (PC-0224-xxx-2)

### Applications

The economic power supplies in the Power Compact series set new standards in their class. Above-average robustness against transients and energetic surge pulses at their input and equipped with essential additional aspects for a worldwide high plant availability. A powerful and flexible option that's still light and compact. Due to a single or two-phase supply from 180 V to 550 V, these power supplies are suitable for a highly diverse range of applications in solar, measurement and control technology and they really come into their own in industrial and building automation. The output voltage can be set easily using the rotary potentiometer on the front of the housing. The robust DIN rail fastening method and push-in connection terminals enable fast and secure mounting.

### Standards

Primary switched mode power supply  
to UL 60950, UL 508

Safety:  
EN 61558-2-16, EN 60950-1

EMC:  
EN 61204-3

### Approvals



UL 60950, UL 508, GL (prepared)

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## Single- and two-phase, primary switched mode power supply **PC 2AC**

Typ		PC-0224-050-0	PC-0224-050-2	PC-0224-100-0	PC-0224-100-2
Electrical data	<b>Input</b>				
	Input rated voltage	200 - 500 Vac	200 - 500 Vac	200 - 500 Vac	200 - 500 Vac
	Input voltage range	180 - 550 Vac (254 - 780 Vdc)	180 - 550 Vac (254 - 780 Vdc)	180 - 550 Vac (254 - 780 Vdc)	180 - 550 Vac (254 - 780 Vdc)
	Input voltage derating	-0.5 %/Vac < 200 Vac (-0.4 %/Vdc < 280 Vdc)	-0.5 %/Vac < 200 Vac (-0.4 %/Vdc < 280 Vdc)	0.5 %/Vac < 200 Vac	0.5 %/Vac < 200 Vac
	Rated frequency range	44 - 66 Hz	44 - 66 Hz	44 - 66 Hz	44 - 66 Hz
	Input rated current (rated load)	1.25 A (200 Vac) / 0.67 A (500 Vac)	1.25 A (200 Vac) / 0.67 A (500 Vac)	1.97 A (230 Vac)	1.97 A (230 Vac)
	Starting current limiter	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC
	Switch-on time	0.98 s (200 Vac) / 0.47 s (500 Vac)	0.98 s (200 Vac) / 0.47 s (500 Vac)	0.5 s (1 x 230 Vac / 3 x 400 Vac)	0.5 s (1 x 230 Vac / 3 x 400 Vac)
	Mains buffering (rated load)	15 ms (200 Vac) / 126 ms (500 Vac)	15 ms (200 Vac) / 126 ms (500 Vac)	20 ms (230 Vac) / 78 ms (400 Vac)	20 ms (230 Vac) / 78 ms (400 Vac)
	Power factor	0.52	0.52	0.52	0.52
Input fuse internal	3.15 A	3.15 A	6.3 AT	6.3 AT	
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor	
Electrical data	<b>Output</b>				
	Output rated voltage	24 Vdc	24 Vdc	24 Vdc	24 Vdc
	Output voltage range	23 - 28.5 Vdc	23 - 28.5 Vdc	23 - 28.5 Vdc	23 - 28.5 Vdc
	Output rated current	5 A	5 A	10 A	10 A
	Power Boost	-	7.5 A / 5 s	-	15 A / 5 s @24 Vdc >260 Vac
	Output limited current	typ. 5.5 A	8.5 A	11 A	typ. 11 A
	Tripping of LS circuit breakers	max. B4	max. B4	max. B6/ C2	max. B6/ C2
	Parallel connection	Yes	Yes	Yes	Yes
	Serial operation	Yes	Yes	Yes	Yes
	Power dissipation, no load/rated load	0.94 W / 16.36 W (230 Vac) 1.35 W / 14.55 W (400 Vac)	0.94 W / 16.36 W (230 Vac) 1.35 W / 14.55 W (400 Vac)	1.33 W / 27.77 W (230 Vac) 2 W / 20.27 W (400 Vac)	1.33 W / 27.77 W (230 Vac) 2 W / 20.27 W (400 Vac)
	Max. power losses	18.2 W (200 Vac / 24 V / 5 A)	18.2 W (200 Vac / 24 V / 5 A)	27.77 W (230 Vac / 24 V / 10 A)	27.77 W (230 Vac / 24 V / 10 A)
	Ripple factor	typ. 30 mVss	typ. 30 mVss	typ. 22 mVss	typ. 22 mVss
	Efficiency	typ. 89 %	typ. 89 %	typ. 90% (230V) / 92.5% (400V)	typ. 90% (230V) / 92.5% (400V)
	Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc	35 Vdc
	Over-voltage-protection	max. 40 Vdc	max. 40 Vdc	typ. 40 Vdc	typ. 40 Vdc
Signaling	Status indicator	LED green	LED green	LED green	LED green
	Signal output	Relay contact	Relay contact	Relay contact	Relay contact
<b>Approvals</b>					
Approvals	cURus, cULus, GL (prepared)	cURus, cULus, GL (prepared)	cURus, cULus (prepared), GL (prepared)	cURus, cULus (prepared), GL (prepared)	
<b>Environment</b>					
Type of cooling	natural convection	natural convection	natural convection	natural convection	
Ambient temperature	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	
Storage temperature	-25 °C ... +85 °C	-25 °C ... +85 °C	-25 °C ... +85 °C	-25 °C ... +85 °C	
Derating	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm	
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm	
<b>Safety and protection</b>					
Protection index	IP 20	IP 20	IP 20	IP 20	
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection	
<b>Order numbers</b>					
<b>Order Number</b>	<b>PC-0224-050-0</b>	<b>PC-0224-050-2</b>	<b>PC-0224-100-0</b>	<b>PC-0224-100-2</b>	

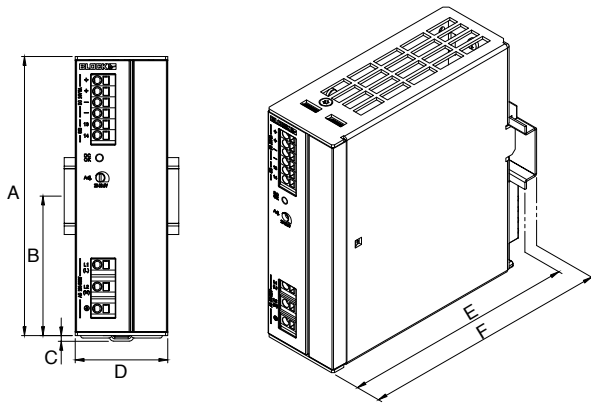


## Single- and two-phase, primary switched mode power supply **PC 2AC**

Mechanical data	Typ	Mounting position	Terminals signalling (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Terminals input (direct plug-in technology Push-in)	Weight	Dimension (W x H x D)	Dimension picture (in mm)						
								A	B	C	D	E	F	
PC-0224-050-0		horizontal for standard rail DIN TS35	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	0.6 kg	42 x 127 x 126 mm	1	127	63.5	3	42	118.5	126
PC-0224-050-2		horizontal for standard rail DIN TS35	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	0.6 kg	42 x 127 x 126 mm	2	127	63.5	3	42	118.5	126
PC-0224-100-0		horizontal for standard rail DIN TS35	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	0.8 kg	55 x 127 x 125 mm	3	127	63.5	3	55	118.5	125
PC-0224-100-2		horizontal for standard rail DIN TS35	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	max 2,5 mm <sup>2</sup>	0.8 kg	55 x 127 x 125 mm	4	127	63.5	3	55	118.5	125

### Dimension pictures

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