

POWER COMPACT

POWER COMPACT

The basic power supply for your application

Power Compact combines the basic functionality of an economic switched mode power supply with the essential additional feature for a high system availability. The devices cover the average power requirements from 120 W to 480 W.

Power range from 120 to 480 W
Universal input of 85 to 264 Vac
Stabilized and variable output voltage



Single-phase



Highlights

✓ Quick tripping of
standard circuit breakers

✓ Robust
Support rail mounting

✓ Potential-free
"DC OK" signal
contact

✓ Push-In
connection technology

✓ Constant current limiting
on overload

Neuheiten Product News

Schaltnetzteile mit Basisfunktionalität

Power supplies with basic functions

Varianten / Technische Daten
Versions / Technical data

**1-phase****NEW****2-phase****NEW****3-phase**

NEU
NEW

Schaltnetzteile Switched mode power supplies

Die Basis-Stromversorgung The base power supply

Die ökonomischen Schaltnetzteile der Baureihe Power Compact setzen Maßstäbe in ihrer Klasse. Überdurchschnittlich robust gegen Überspannungen und ausgestattet mit wesentlichen Zusatzmerkmalen für eine weltweit hohe Anlagenverfügbarkeit.

The economic power supplies in the Power Compact series set new standards in their class. Above-average robustness against transient overvoltages and equipped with essential additional aspects for a worldwide high plant availability.

Besonderheiten Highlights

✓ Schnelles Auslösen von Leitungsschutzschaltern
Fast tripping of standard circuit breakers

✓ Parallel schaltbar
Parallel operation

✓ DC OK Signalisierung
DC OK signal contact

✓ Robuste Tragschienenbefestigung aus Zinkdruckguss
Robust DIN rail mounting

✓ Push-In Anschluss Technik
Push-in terminals

✓ Besonders überspannungsfest
Highly resistant to transient overvoltages

Anwendungen Applications

Die Allround-Netzgeräte eignen sich für die verschiedensten Applikationen in der Solar-, Mess- und Regelungstechnik und spielen ihre Stärken insbesondere im Anlagen- und Maschinenbau aus. Die Ausgangsspannung lässt sich einfach durch das Drehpotentiometer an der Gehäusenvorderseite einstellen.

These versatile power supply units are suitable for an extremely diverse range of applications in solar, measurement and control technology, and they excel in industrial and building automation. The output voltage can be set easily using the rotary potentiometer on the front of the housing.

Zulassungen Approvals



vorbereitet pending

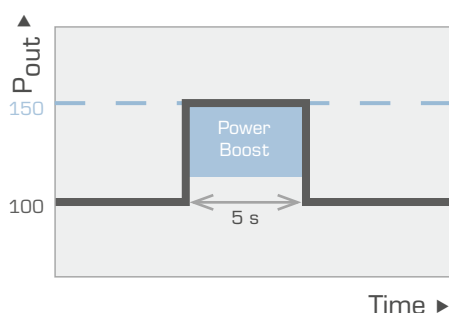


Technische Daten

Technical data

Type	PC-0112-150-0	PC-0124-050-0	PC-0124-100-0	PC-0124-200-0	PC-0148-050-0	PC-0148-100-0
Eingangsphasen Input phases	1 AC	1 AC	1 AC	1 AC	1 AC	1 AC
Eingangsspannungsbereich Input voltage range	85 - 264 Vac	85 - 264 Vac	85 - 264 Vac	85 - 264 Vac	85 - 264 Vac	85 - 264 Vac
Ausgangsspannungsbereich Output voltage range	11.5 - 15 Vdc	23 - 28,5 Vdc	23 - 28,5 Vdc	23 - 28,5 Vdc	40 - 56 Vdc	40 - 56 Vdc
Ausgangsstrom Output current	15 A	5 A	10 A	20 A	5 A	10 A
Leistung Power	180 W	120 W	240 W	480 W	180 W	480 W
Maße (B x H x T) Dimensions (W x H x D)	55 x 127 x 152.5 mm	42 x 127 x 118.5 mm	55 x 127 x 152.5 mm	95 x 127 x 150.5 mm	55 x 127 x 152.5 mm	95 x 127 x 150.5 mm
Bestellnummer Order number	PC-0112-150-0	PC-0124-050-0	PC-0124-100-0	PC-0124-200-0	PC-0148-050-0	PC-0148-100-0

Type	NEW PC-0224-050-0	NEW PC-0324-100-0	NEW PC-0324-200-0	NEW PC-0324-200-2	NEW PC-0324-400-0	NEW PC-0324-400-2
Eingangsphasen Input phases	1 / 2 AC	3 AC	3 AC	3 AC	3 AC	3 AC
Eingangsspannungsbereich Input voltage range	180 - 550 Vac	320 - 575 Vac	320 - 575 Vac	320 - 575 Vac	320 - 575 Vac	320 - 575 Vac
Ausgangsspannungsbereich Output voltage range	23 - 28,5 Vdc	23 - 28,5 Vdc	23 - 28,5 Vdc	23 - 28,5 Vdc	23 - 28,5 Vdc	23 - 28,5 Vdc
Ausgangsstrom Output current	5 A	10 A	20 A	20 A	40 A	40 A
Leistung Power	120 W	240 W	480 W	480 W	960 W	960 W
Maße (B x H x T) Dimensions (W x H x D)	42 x 127 x 118.5 mm	55 x 127 x 152 mm	80 x 127 x 152 mm	80 x 127 x 152 mm	126 x 127 x 170 mm	126 x 127 x 170 mm
Besonderheiten Highlights	Ultra Weitbereichseingang Ultra wide input range			Power Boost		Power Boost
Bestellnummer Order number	PC-0224-050-0	PC-0324-100-0	PC-0324-200-0	PC-0324-200-2	PC-0324-400-0	PC-0324-400-2

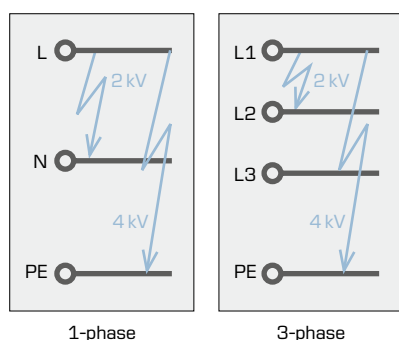


Optionaler Power Boost

Optional Power Boost

Zwei 3-phasige Varianten stehen mit 50% Leistungsreserven für das Starten von Verbrauchern mit hohen Einschaltströmen zur Verfügung.

Two 3-phase versions are available with 50% power reserves for high inrush current applications.



Besonders überspannungsfest

Highly resistant to transient overvoltages

BLOCK Power Compact Netzteile sind überdurchschnittlich robust gegen Transienten und energiereiche Störimpulse am Netzeingang.

BLOCK Power Compact units possess above-average insensitivity to transients and energetic surge pulses at their input.

Neuheiten Product News

Elektronische Schutzschalter

Electronic circuit breakers

Varianten / Technische Daten

Versions / Technical data



Elektronische Schutzschalter

Electronic circuit breakers

Elektronische Schutzschalter dienen der selektiven Absicherung von DC-Stromkreisen. Sie schützen Stromkreise gegen Überstrom und Kurzschluss wesentlich genauer als klassische Leitungsschutzschalter.

Electronic circuit breakers are used for selective protection of DC circuits. They protect circuits against overcurrents and short circuits with a much higher degree of precision compared to classic circuit breakers.

Besonderheiten

Highlights

✓ Zuverlässiges Einschalten hoher Kapazitäten (> 50.000µF)
Reliable switch-on of high capacities (> 50.000 µF)

✓ Summenfehlerkontakt für einfache Ferndiagnose
Group alarm signal for simple diagnosis

✓ Optimale Kennlinie für jede Applikation
Optimum tripping characteristic for any application

✓ Sequentielles und lastabhängiges Zuschalten der Kanäle
Sequential and load-dependent switching-on of channels

✓ Einstellbarer Auslösestrom pro Kanal
Adjustable tripping current per channel

✓ Umfangreiche Einzelkanal-diagnose
Comprehensive single-channel diagnosis

✓ Fern-Ein/Ausschalten beliebiger Kanäle
Remote switch-on/off of any channels

✓ Fern-Wiedereinschalten ausgelöster Kanäle
Remote reset of tripped channels

Platzsparend

BLOCK Schutzschalter minimieren den Platzbedarf auf bis zu 5,25 mm pro Kanal mit allen 8-Kanal-Modulen.

Space saving

BLOCK circuit breakers minimise space requirements to only 5.25 mm per channel for all 8-channel units.

Intelligenter Überstromschutz

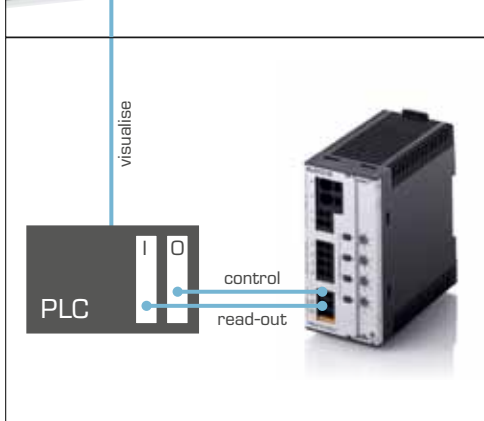
Integrierbar in den gesamten Steuerungs- und Überwachungsprozess.

Intelligent overcurrent protection

Integrable in the complete management and monitoring process.

Zulassungen

Approvals

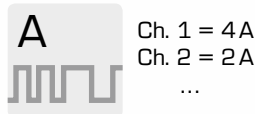


ECONOMY REMOTE **NEW**

Elektronischer Schutzschalter, besonders geeignet für den Serienmaschinenbau
Electronic circuit breaker, particularly suitable for standard machine production

Dank einstellbarer Auslöseströme direkt durch die SPS wird die Inbetriebnahmezeit einer Serienmaschine verkürzt. Der ökonomische REMOTE-Schutzschalter verhindert somit nicht-autorisierte Stromwertänderungen am Gerät.

The start-up time of a production machine is shortened thanks to adjustable tripping currents being transmitted directly through the PLC. The economical REMOTE circuit breaker thus prevents non-authorised current value changes in the equipment.

ECONOMY REMOTEsteuern
controlauslesen
read-out**Besonderheiten Highlights**

✓ Zuverlässiges Einschalten
hoher Kapazitäten (> 50.000µF)
Reliable switch-on of high
capacities (> 50.000 µF)

✓ Stufig einstellbare Auslöseströme über 2-Draht-Schnittstelle
Stepped setting of tripping
currents via 2-wire interface

✓ Umfangreiche
Einzelkanaldiagnose
Comprehensive single-channel
diagnosis

✓ Fern-Ein/Ausschalten
beliebiger Kanäle
Remote switch-on/off of
any channels

ECONOMY REMOTE

POWER COMPACT

8 Kanal Channels



Maße:
Dimensions:
A: 127 mm
B: 42 mm
C: 116.5 mm



Ausgang Output	Bestell-Nr. Order No
24 V / 8x 1-6 A	PC-0724-480-0
24 V / 8x 2-10 A	PC-0724-800-0
NEW 24 V / 8x 2-10 A	PC-0724-800-1

POWER MINI

4 Kanal Channels



Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm



Ausgang Output	Bestell-Nr. Order No
12 V / 4x 2-10 A	PM-0712-400-0
24 V / 4x 1-6 A	PM-0724-240-0
24 V / 4x 2-10 A	PM-0724-400-0
NEW 24 V / 4x 2-10 A	PM-0724-400-1
NEW 48 V / 4x 2-10 A	PM-0748-400-0

POWER MINI

2 Kanal Channels



Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm



Ausgang Output	Bestell-Nr. Order No
12 V / 2x 2-10 A	PM-0712-200-0
24 V / 2x 1-6 A	PM-0724-120-0
24 V / 2x 2-10 A	PM-0724-200-0
NEW 24 V / 2x 2-10 A	PM-0724-200-1
NEW 48 V / 2x 2-10 A	PM-0748-200-0

ECONOMY SMART

Thermomagnetische Kennlinie
Thermomagnetic characteristic

Stufig einstellbare Auslöseströme über Stromwahlschalter:
Stepped setting of tripping currents via current selector switch:

1-6 A = 1/2/3/4/5/6 A
2-10 A = 2/3/4/6/8/10 A

mit steckbarer Federzugklemme (Tiefe um 27,5 mm erhöht)
with plug-in spring-loaded terminal (depth increased by 27.5 mm)

POWER COMPACT

8 Kanal Channels



Maße:
Dimensions:
A: 127 mm
B: 42 mm
C: 116.5 mm



Ausgang Output	Bestell-Nr. Order No
NEW 24 V / 8x 2-10 A	PC-3724-800-0

POWER MINI

4 Kanal Channels



Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm



Ausgang Output	Bestell-Nr. Order No
NEW 24 V / 4x 2-10 A	PM-3724-400-0

POWER MINI

2 Kanal Channels



Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm



Ausgang Output	Bestell-Nr. Order No
NEW 24 V / 2x 2-10 A	PM-3724-200-0

ECONOMY REMOTE

Thermomagnetische Kennlinie
Thermomagnetic characteristic

Stufig einstellbare Auslöseströme über 2-Draht-Schnittstelle:
Stepped setting of tripping currents via 2-wire interface

2-10 A = 2/3/4/6/8/10 A
Auslösestrom ab Werk: 10 A
Factory setting: tripping currents 10 A

Entscheidungshilfe Decision support

Elektronische Schutzschalter
Electronic circuit breaker

Auslösekennlinie: (thermomagnetisch)
Tripping characteristic: (thermomagnetic)

Auslösekennlinie: (aktive Strombegrenzung)
Tripping characteristic: (active current limiting)

Einstellbarkeit Auslöseströme über Stromwahlschalter
Setting of tripping currents via current selector switch

Einstellbarkeit Auslöseströme über 2-Draht-Schnittstelle
Setting of tripping currents via 2-wire interface

Einstellbarkeit Auslöseströme über Stromwahlschalter
Setting of tripping currents via current selector switch

Fest voreingestellte Auslöseströme
Preset tripping currents

ECONOMY SMART

ECONOMY REMOTE

BASIC SMART

BASIC FIX

POWER COMPACT
8 Kanal Channels

Maße:
Dimensions:
A: 127 mm
B: 42 mm
C: 116.5 mm

Ausgang Output	Bestell-Nr. Order No
24 V / 8x 0.5-6 A	PC-0824-480-0
24 V / 8x 0.5-6 A	PC-0824-480-1

POWER MINI
4 Kanal Channels

Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm

Ausgang Output	Bestell-Nr. Order No
24 V / 4x 0.5-6 A	PM-0824-240-0
24 V / 4x 0.5-6 A	PM-0824-240-1
24 V / 4x 2-12 A	PM-0824-480-0

POWER MINI
2 Kanal Channels

Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm

Ausgang Output	Bestell-Nr. Order No
24 V / 2x 0.5-6 A	PM-0824-120-0
24 V / 2x 0.5-6 A	PM-0824-120-1
24 V / 2x 2-12 A	PM-0824-240-2

BASIC SMART

Aktive Strombegrenzung
Active current limiting

Stufig einstellbare Auslöseströme über Stromwahlschalter:
Stepped setting of tripping currents via current selector switch:
0.5-6 A = 0.5/1/2/3/4/6 A
2-12 A = 2/4/6/8/10/12 A

mit steckbarer Federzugklemme
(Tiefe um 27,5 mm erhöht)
with plug-in spring-loaded terminal
(depth increased by 27.5 mm)

POWER MINI
4 Kanal Channels

Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm

Ausgang Output	Bestell-Nr. Order No
24 V / 4x 6 A	PM-2824-240-0
24 V / 2x 3 A + 2x 6 A	PM-2824-180-0

POWER MINI
2 Kanal Channels

Maße:
Dimensions:
A: 90 mm
B: 45 mm
C: 90.5 mm

Ausgang Output	Bestell-Nr. Order No
24 V / 2x 6 A	PM-2824-120-0

BASIC FIX

Aktive Strombegrenzung
Active current limiting

Fest voreingestellte Auslöseströme
Preset tripping currents

ECONOMY SMART	ECONOMY REMOTE	BASIC SMART	BASIC FIX	Ausstattung im Überblick Features
✓		✓		Einstellbare Auslöseströme pro Kanal über Stromwahlschalter Setting of tripping currents per channel via current selector switch
	✓			Einstellbare Auslöseströme pro Kanal über 2-Draht-Schnittstelle Setting of tripping currents per channel via 2-wire interface
✓	✓	✓	✓	Fern-Ein/Ausschalten beliebiger Kanäle Remote switch-on/off of any channels
✓	✓	✓	✓	Statusübertragung "Ein"/"Aus"/"Ausgelöst" pro Kanal "On"/"off"/"tripped" status transmission per channel
✓	✓	✓		Statusübertragung "Überstrom" pro Kanal "Overcurrent" status transmission per channel
✓	✓	✓	✓	Datenübertragung "aktuelle Eingangsspannung"/"eingestellter Auslösestrom" pro Kanal "Actual input voltage"/"set tripping current" data transmission per channel
		✓		Datenübertragung "aktuelle Ausgangsströme" pro Kanal "Actual output currents" data transmission per channel
✓	✓	✓	✓	Summenfehlerkontakt für ausgelöste Kanäle Group alarm signal for tripped channels
✓	✓	✓	✓	Fern-Wiedereinschalten ausgelöster Kanäle Remote reset of tripped channels
		✓		Aktive Strombegrenzung typ. 1,7 x I _N Active current limiting typ. 1.7 x I _{rated}
			✓	Aktive Strombegrenzung typ. 1,3 x I _N Active current limiting typ. 1.3 x I _{rated}

Änderungen vorbehalten
Subject to change

Single phase, primary switched mode power supply **PC-0112-150-0**



Advantages

Stabilised and adjustable output voltage
Fast tripping of standard bi-metal circuit breakers
DC OK signal contact
Parallel operation
Push-in terminals
Robust DIN rail mounting
Resistant to transient overvoltages up to 4 kV

Applications

Power Compact combines the basic functionality of an economic switched mode power supply with key additional features to ensure high system availability. A powerful and flexible option that's still light and compact. Our real all-rounders, these power supply units 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 devices cover the average power requirement from 120 W to 480 W. Versions with 12 V, 24 V, and 48 V are available, which allow a range of applications. A version with 5 A rated current is available for a single or two-phase supply from 180 V to 550 V. 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/CSA 60950 recognised (E213214), UL508 listed (E219022)
Germanischer Lloyd prepared



Single phase, primary switched mode power supply

PC-0112-150-0



Electrical data

Type	PC-0112-150-0
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	95 - 264 Vac (120 - 372 Vdc)
Input voltage derating	-2.5 %/Vac < 100 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	2.07 A (100 Vac) / 0.95 A (230 Vac)
Starting current limiter	< 30 A, NTC (active)
Switch-on time	0.71 s (100 Vac) / 0.43 s (230 Vac)
Mains buffering	28 ms (100 Vac) / 28 ms (230 Vac)
Power factor	0.91 (active PFC)
Input fuse internal	6.3 A
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	12 Vdc
Output voltage range	11.5 - 15 Vdc
Output rated current	15 A
Output limited current	typ. 16.5 A (constant current)
Tripping of LS circuit breakers	max. B4
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	4.4 W / 21.8 W (230 Vac)
Max. power losses	24.7 W (100 Vac / 12 V / 15 A)
Ripple factor	typ. 35 mVss
Efficiency	typ. 90 %
Resistance to reverse feed max.	35 Vdc
Over-voltage-protection	max. 20 Vdc
Signaling	
Status display	LED green
Signal output	Relay contact
Environment	
Cooling method	natural convection
Ambient temperature	-25°C ... +70°C
Storage temperature	-25°C ... +85°C
Derating	-5 %/K > +60°C @ 196 - 264 Vac -2.5 %/K > +50°C @ 85 - 195 Vac
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
Order Number	PC-0112-150-0



Mechanical data

Type	PC-0112-150-0
Input	
Terminals Input	Push-in Terminals, max 2.5 mm ²
Output	
Terminals Output	Push-In Terminals, max 2.5 mm ²
Signaling	
Terminals signaling	Push-in Terminals, max 2.5 mm ²
Environment	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.93 kg
Dimensions W x H x D	55 x 127 x 161 mm



Single phase, primary switched mode power supply

PC-0124-050-0

Type		PC-0124-050-0
Electrical data	Input	
	Input rated voltage	100 - 240 Vac
	Input voltage range	95 - 264 Vac (120 - 372 Vdc)
	Input voltage derating	-2,5 %/Vac < 97 Vac
	Rated frequency range	44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load)	2.25 A (100 Vac) / 1.2 A (230 Vac)
	Starting current limiter	< 30 A, NTC
	Switch-on time	0.25 s (100 Vac) / 0.2 s (230 Vac)
	Mains buffering	10 ms (100 Vac) / 80 ms (230 Vac)
	Power factor	0.5
	Input fuse internal	4 A
	Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
	Transient surge voltage protection	Varistor
	Output	
	Output rated voltage	24 Vdc
	Output voltage range	23 - 28,5 Vdc
	Output rated current	5 A
	Output limited current	typ. 5.5 A (constant current)
	Tripping of LS circuit breakers	max. B4
	Parallel connection	Yes
	Serial operation	Yes
	Power dissipation, no load/rated load	1.2 / 14.6 W (230 Vac)
	Max. power losses	19.4 W (100 Vac / 24 V / 5 A)
	Ripple factor	typ. 30 mVss
	Efficiency	typ. 89 %
	Resistance to reverse feed max.	35 Vdc
	Over-voltage-protection	max. 41 Vdc
	Signaling	
	Status display	LED green
	Signal output	Relay contact
	Environment	
	Cooling method	natural convection
	Ambient temperature	-25°C ... +70°C
	Storage temperature	-25°C ... +85°C
	Derating	-5 %/K > +60°C @ 196 - 264 Vac -2.5 %/K > +50°C @ 85 - 195 Vac
	Required minimum spacing (left/right)	-
	Required minimum spacing (over/under)	50 mm
	Safety and protection	
	Protection index	IP 20
	Safety class	I, with PE connection
	Order numbers	
	Order Number	PC-0124-050-0

Type		PC-0124-050-0
Mechanical data	Input	
	Terminals Input	Push-in Terminals, max 2.5 mm ²
	Output	
	Terminals Output	Push-In Terminals, max 2.5 mm ²
	Signaling	
	Terminals signaling	Push-in Terminals, max 2.5 mm ²
	Environment	
	Mounting position	horizontal for standard rail DIN TH 35
	Measures and weights	
	Weight	0.59 kg
	Dimensions W x H x D	42 x 127 x 126 mm



Single phase, primary switched mode power supply

PC-0124-100-0

Type		PC-0124-100-0
Electrical data	Input	
	Input rated voltage	100 - 240 Vac
	Input voltage range	95 - 264 Vac (120 - 372 Vdc)
	Input voltage derating	-2.5 %/Vac < 100 Vac
	Rated frequency range	44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load)	2.74 A (100 Vac) / 1.25 A (230 Vac)
	Starting current limiter	< 30 A, NTC (active)
	Switch-on time	1.3 s (100 Vac) / 0.25 s (230 Vac)
	Mains buffering	15 ms (100 Vac) / 17 ms (230 Vac)
	Power factor	0.92 (active PFC)
	Input fuse internal	6.3 A
	Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C
	Transient surge voltage protection	Varistor
	Output	
	Output rated voltage	24 Vdc
	Output voltage range	23 - 28.5 Vdc
	Output rated current	10 A
	Output limited current	typ. 11 A (constant current)
	Tripping of LS circuit breakers	max. B6, C2
	Parallel connection	Yes
	Serial operation	Yes
	Power dissipation, no load/rated load	6.6 / 24.4 W (230 Vac)
	Max. power losses	31.3 W (100 Vac / 24 V / 10 A)
	Ripple factor	typ. 50 mVss
	Efficiency	typ. 91 %
	Resistance to reverse feed max.	35 Vdc
	Over-voltage-protection	max. 40 Vdc
	Signaling	
	Status display	LED green
	Signal output	Relaiskontakt
	Environment	
	Cooling method	natural convection
	Ambient temperature	-25°C ... +70°C
	Storage temperature	-25°C ... +85°C
	Derating	-5 %/K > +60°C @ 196 - 264 Vac -2.5 %/K > +50°C @ 85 - 195 Vac
	Required minimum spacing (left/right)	-
	Required minimum spacing (over/under)	50 mm
	Safety and protection	
	Protection index	IP 20
	Safety class	I, with PE connection
	Order numbers	
	Order Number	PC-0124-100-0

Type		PC-0124-100-0
Mechanical data	Input	
	Terminals Input	Push-in Terminals, max 2.5 mm ²
	Output	
	Terminals Output	Push-In Terminals, max 2.5 mm ²
	Signaling	
	Terminals signaling	Push-in Terminals, max 2.5 mm ²
	Environment	
	Mounting position	horizontal for standard rail DIN TH 35
	Measures and weights	
	Weight	0.93 kg
	Dimensions W x H x D	55 x 127 x 161 mm



Single phase, primary switched mode power supply

PC-0124-200-0

Type		PC-0124-200-0
Electrical data	Input	
	Input rated voltage	100 - 240 Vac
	Input voltage range	95 - 264 Vac (120 - 372 Vdc)
	Input voltage derating	-2.5 %/Vac < 100 Vac
	Rated frequency range	44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load)	5.56 A (100 Vac) / 2.23 A (230 Vac)
	Starting current limiter	< 30 A, NTC (active)
	Switch-on time	0.45 s (100 Vac) / 0.2 s (230 Vac)
	Mains buffering	20 ms (100 Vac) / 20 ms (230 Vac)
	Power factor	0.98 (active PFC)
	Input fuse internal	10 A
	Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C
	Transient surge voltage protection	Varistor
	Output	
	Output rated voltage	24 Vdc
	Output voltage range	23 - 28,5 Vdc
	Output rated current	20 A
	Output limited current	typ. 22 A (constant current)
	Tripping of LS circuit breakers	max. B6, C6, K4
	Parallel connection	Yes
	Serial operation	Yes
	Power dissipation, no load/rated load	7.2 / 42.4 W (230 Vac)
	Max. power losses	68.3 W (100 Vac / 24 V / 20 A)
	Ripple factor	typ. 70 mVss
	Efficiency	typ. 92 %
	Resistance to reverse feed max.	35 Vdc
	Over-voltage-protection	max. 40 Vdc
	Signaling	
	Status display	LED green
	Signal output	Relay contact
	Environment	
	Cooling method	natural convection
	Ambient temperature	-25°C ... +70°C
	Storage temperature	-25°C ... +85°C
	Derating	-5 %/K > +60°C @ 196 - 264 Vac -2.5 %/K > +50°C @ 85 - 195 Vac
	Required minimum spacing (left/right)	-
	Required minimum spacing (over/under)	50 mm
	Safety and protection	
	Protection index	IP 20
	Safety class	I, with PE connection
	Order numbers	
	Order Number	PC-0124-200-0

Type		PC-0124-200-0
Mechanical data	Input	
	Terminals Input	Push-in Terminals, max 2.5 mm ²
	Output	
	Terminals Output	Push-In Terminals, max 6 mm ²
	Signaling	
	Terminals signaling	Push-in Terminals, max 2.5 mm ²
	Environment	
	Mounting position	horizontal for standard rail DIN TH 35
	Measures and weights	
	Weight	1.60 kg
	Dimensions W x H x D	95 x 127 x 159 mm



Single phase, primary switched mode power supply

PC-0148-050-0



Electrical data

Type	PC-0148-050-0
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	95 - 264 Vac (120 - 372 Vdc)
Input voltage derating	-2.5 %/Vac < 100 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	2.68 A (100 Vac) / 1.19 A (230 Vac)
Starting current limiter	< 30 A, NTC (active)
Switch-on time	0.68 s (100 Vac) / 0.31 s (230 Vac)
Mains buffering	21 ms (100 Vac) / 21 ms (230 Vac)
Power factor	0.92 (active PFC)
Input fuse internal	6.3 A
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	48 Vdc
Output voltage range	40 - 56 Vdc
Output rated current	5 A
Output limited current	typ. 5.5 A (constant current)
Tripping of LS circuit breakers	max. B6, C4, K2
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	7 W / 40,8 W (230 Vac)
Max. power losses	26,5 W (100 Vac / 48 V / 5 A)
Ripple factor	typ. 35 mVss
Efficiency	typ. 92 %
Resistance to reverse feed max.	35 Vdc
Over-voltage-protection	max. 60 Vdc
Signaling	
Status display	LED green
Signal output	Relay contact
Environment	
Cooling method	natural convection
Ambient temperature	-25°C ... +70°C
Storage temperature	-25°C ... +85°C
Derating	-5 %/K > +60°C @ 196 - 264 Vac -2.5 %/K > +50°C @ 85 - 195 Vac
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
Order Number	PC-0148-050-0



Mechanical data

Type	PC-0148-050-0
Input	
Terminals Input	Push-in Terminals, max 2.5 mm ²
Output	
Terminals Output	Push-In Terminals, max 2.5 mm ²
Signaling	
Terminals signaling	Push-in Terminals, max 2.5 mm ²
Environment	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.93 kg
Dimensions W x H x D	55 x 127 x 161 mm





Single phase, primary switched mode power supply

PC-0148-100-0

Type		PC-0148-100-0
Electrical data	Input	
	Input rated voltage	100 - 240 Vac
	Input voltage range	95 - 264 Vac (120 - 372 Vdc)
	Input voltage derating	-2.5 %/Vac < 100 Vac
	Rated frequency range	44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load)	5.15 A (100 Vac) / 2.22 A (230 Vac)
	Starting current limiter	< 30 A, NTC (active)
	Switch-on time	0.45 s (100 Vac) / 0.2 s (230 Vac)
	Mains buffering	20 ms (100 Vac) / 20 ms (230 Vac)
	Power factor	0.92 (active PFC)
	Input fuse internal	10 A
	Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C
	Transient surge voltage protection	Varistor
	Output	
	Output rated voltage	48 Vdc
	Output voltage range	40 - 56 Vdc
	Output rated current	10 A
	Output limited current	typ. 11 A (constant current)
	Tripping of LS circuit breakers	max. B6, C4, K2
	Parallel connection	Yes
	Serial operation	Yes
	Power dissipation, no load/rated load	11.7 / 36.3 W (230 Vac)
	Max. power losses	64.9 W (100 Vac / 48 V / 10 A)
	Ripple factor	typ. 80 mVss
	Efficiency	typ. 93 %
	Resistance to reverse feed max.	35 Vdc
	Over-voltage-protection	max. 60 Vdc
	Signaling	
	Status display	LED green
	Signal output	Relay contact
	Environment	
	Cooling method	natural convection
	Ambient temperature	-25°C ... +70°C
	Storage temperature	-25°C ... +85°C
	Derating	-5 %/K > +60°C @ 196 - 264 Vac -2.5 %/K > +50°C @ 85 - 195 Vac
	Required minimum spacing (left/right)	-
	Required minimum spacing (over/under)	50 mm
	Safety and protection	
	Protection index	IP 20
	Safety class	I, with PE connection
	Order numbers	
	Order Number	PC-0148-100-0

Type		PC-0148-100-0
Mechanical data	Input	
	Terminals Input	Push-in Terminals, max 2.5 mm ²
	Output	
	Terminals Output	Push-In Terminals, max 6 mm ²
	Signaling	
	Terminals signaling	Push-in Terminals, max 2.5 mm ²
	Environment	
	Mounting position	horizontal for standard rail DIN TH 35
	Measures and weights	
	Weight	1.60 kg
	Dimensions W x H x D	95 x 127 x 159 mm

Single- and two phases, primary switched mode power supply **PC-0224-050-0**



Advantages

Stabilised and adjustable output voltage
Fast tripping of standard bi-metal circuit breakers
DC OK signal contact
Parallel operation
Push-in terminals
Robust DIN rail mounting
Resistant to transient overvoltages up to 4 kV

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/CSA 60950, UL 508, GL (in preparation)



Single- and two phases, primary switched mode power supply

PC-0224-050-0

Electrical data

Type	PC-0224-050-0
Input	
Input rated voltage	200 - 500 Vac
Input voltage range	180 - 550 Vac (254 - 780 Vdc)
Input voltage derating	-0.5 %/Vac < 200 Vac (-0.4 %/Vdc < 280 Vdc)
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	1.25 A (200 Vac) / 0.67 A (500 Vac)
Starting current limiter	< 30 A, NTC
Switch-on time	0.98 s (200 Vac) / 0.47 s (500 Vac)
Mains buffering	15 ms (200 Vac) / 126 ms (500 Vac)
Power factor	0.52
Input fuse internal	3.15 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	24 Vdc
Output voltage range	23 - 28,5 Vdc
Output rated current	5 A
Output limited current	typ. 5.5 A (constant current)
Tripping of LS circuit breakers	max. B4
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	0.94 W / 16.36 W (230 Vac) 1.35 W / 14.55 W (400 Vac)
Max. power losses	18.2 W (200 Vac / 24 V / 5 A)
Ripple factor	typ. 30 mVss
Efficiency	typ. 89 %
Resistance to reverse feed max.	35 Vdc
Over-voltage-protection	max. 40 Vdc
Signaling	
Status display	LED green
Signal output	Relay contact
Environment	
Cooling method	natural convection
Ambient temperature	-25°C ... +70°C
Storage temperature	-25°C ... +85°C
Derating	-2,5 %/K > +55°C
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
Order Number	PC-0224-050-0

Mechanical data

Type	PC-0224-050-0
Input	
Terminals Input	Push-in Terminals, max 2.5 mm ²
Output	
Terminals Output	Push-In Terminals, max 2.5 mm ²
Signaling	
Terminals signaling	Push-in Terminals, max 2.5 mm ²
Environment	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.60 kg
Dimensions W x H x D	42 x 127 x 126 mm

Three phases, primary switched mode power supply **PC-0324-100-0**



Advantages

Stabilised and adjustable output voltage
Fast tripping of standard bi-metal circuit breakers
DC OK signal contact
Parallel operation
Push-in terminals
Robust DIN rail mounting
Resistant to transient overvoltages up to 4 kV
Optional with 50 % Power Boost

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. 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. All versions are available as option with 50% power reserves for high inrush current applications.

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/CSA 60950, UL 508, GL (in preparation)



Three phases, primary switched mode power supply PC-0324-100-0

Type	PC-0324-100-0
Electrical data	Input
	Input rated voltage 400 - 500 Vac
	Input voltage range 320 - 575 Vac
	Input voltage derating -
	Rated frequency range 44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load) 3 x 0.73 A (400 Vac) / 0.66 A (500 Vac)
	Starting current limiter < 30 A, NTC
	Input fuse internal -
	Recommended back-up fuse (circuit breaker) 6 A, 10 A, 16 A, characteristic B, C
	Transient surge voltage protection Varistor
	Output
	Output rated voltage 24 Vdc
	Output voltage range 23 - 28,5 Vdc
	Output rated current 10 A
	Output limited current typ. 11 A (constant current)
	Power Boost -
	Tripping of LS circuit breakers max. B6/C2 @ 2.5mm ² /20m
	Parallel connection Yes
	Serial operation Yes
	Power dissipation, no load/rated load 2.7 W / 27.6 W (400 Vac)
	Ripple factor typ. 30 mVss
	Efficiency typ. 90 %
	Resistance to reverse feed max. 35 Vdc
	Over-voltage-protection max. 40 Vdc
	Signaling
	Status display LED green
	Signal output Relay contact
	Environment
	Cooling method natural convection
	Ambient temperature -25°C ... +70°C
	Storage temperature -25°C ... +85°C
	Derating -2,5 %/K > +55° C
	Required minimum spacing (left/right) -
	Required minimum spacing (over/under) 50 mm
	Safety and protection
	Protection index IP 20
	Safety class I, with PE connection
	Order numbers
	available from July 2014
	Order Number PC-0324-100-0

Type	PC-0324-100-0
Mechanical data	Input
	Terminals Input Push-in Terminals, max 2.5 mm ²
	Output
	Terminals Output Push-In Terminals, max 2.5 mm ²
	Signaling
	Terminals signaling Push-in Terminals, max 2.5 mm ²
	Environment
	Mounting position horizontal for standard rail DIN TH 35
	Measures and weights
	Weight 1.02 kg
	Dimensions W x H x D 55 x 127 x 152 mm



Three phases, primary switched mode power supply PC-0324-100-2

Type	PC-0324-100-2
Electrical data	Input
	Input rated voltage 400 - 500 Vac
	Input voltage range 320 - 575 Vac
	Input voltage derating -
	Rated frequency range 44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load) 3 x 0.73 A (400 Vac) / 0.66 A (500 Vac)
	Starting current limiter < 30 A, NTC
	Input fuse internal -
	Recommended back-up fuse (circuit breaker) 6 A, 10 A, 16 A, characteristic B, C
	Transient surge voltage protection Varistor
	Output
	Output rated voltage 24 Vdc
	Output voltage range 23 - 28,5 Vdc
	Output rated current 10 A
	Output limited current typ. 11 A (constant current)
	Power Boost 15 A / 5 s
	Tripping of LS circuit breakers max. B6/C2 @ 2.5mm ² / 20m
	Parallel connection Yes
	Serial operation Yes
	Power dissipation, no load/rated load 2.7 W / 27.6 W (400 Vac)
	Ripple factor typ. 30 mVss
	Efficiency typ. 90 %
	Resistance to reverse feed max. 35 Vdc
	Over-voltage-protection max. 40 Vdc
	Signaling
	Status display LED green
	Signal output Relay contact
	Environment
	Cooling method natural convection
	Ambient temperature -25°C ... +70°C
	Storage temperature -25°C ... +85°C
	Derating -2,5 %/K > +55° C
	Required minimum spacing (left/right) -
	Required minimum spacing (over/under) 50 mm
	Safety and protection
	Protection index IP 20
	Safety class I, with PE connection
	Order numbers
	available from July 2014
	Order Number PC-0324-100-2

Type	PC-0324-100-2
Mechanical data	Input
	Terminals Input Push-in Terminals, max 2.5 mm ²
	Output
	Terminals Output Push-In Terminals, max 2.5 mm ²
	Signaling
	Terminals signaling Push-in Terminals, max 2.5 mm ²
	Environment
	Mounting position horizontal for standard rail DIN TH 35
	Measures and weights
	Weight 1.02 kg
Dimensions W x H x D 55 x 127 x 152 mm	



Three phases, primary switched mode power supply PC-0324-200-0

Electrical data		Type	PC-0324-200-0
Electrical data	Input		
	Input rated voltage		400 - 500 Vac
	Input voltage range		320 - 575 Vac
	Input voltage derating		-
	Rated frequency range		44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load)		3 x 1.21 A (400 Vac) / 1.03 A (500 Vac)
	Starting current limiter		< 30 A, NTC
	Input fuse internal		-
	Recommended back-up fuse (circuit breaker)		6 A, 10 A, 16 A, characteristic B, C
	Transient surge voltage protection		Varistor
	Output		
	Output rated voltage		24 Vdc
	Output voltage range		23 - 28,5 Vdc
	Output rated current		20 A
	Output limited current		typ. 22 A (constant current)
	Power Boost		-
	Tripping of LS circuit breakers		max. B6/C4/K4 @ 6mm ² / 20m
	Parallel connection		Yes
	Serial operation		Yes
	Power dissipation, no load/rated load		4.03 W / 42.53 W (400 Vac)
	Ripple factor		typ. 30 mVss
	Efficiency		typ. 92 %
	Resistance to reverse feed max.		35 Vdc
	Over-voltage-protection		max. 40 Vdc
	Signaling		
	Status display		LED green
	Signal output		Relay contact
	Environment		
	Cooling method		natural convection
	Ambient temperature		-25°C ... +70°C
	Storage temperature		-25°C ... +85°C
	Derating		-2,5 %/K > +55° C
	Required minimum spacing (left/right)		-
	Required minimum spacing (over/under)		50 mm
	Safety and protection		
	Protection index		IP 20
	Safety class		I, with PE connection
	Order numbers		
	available from		July 2014
	Order Number		PC-0324-200-0
Mechanical data		Type	PC-0324-200-0
Mechanical data	Input		
	Terminals Input		Push-in Terminals, max 2.5 mm ²
	Output		
	Terminals Output		Push-In Terminals, max 6 mm ²
	Signaling		
	Terminals signaling		Push-in Terminals, max 2.5 mm ²
	Environment		
	Mounting position		horizontal for standard rail DIN TH 35
	Measures and weights		
	Weight		1.51 kg
	Dimensions W x H x D		80 x 127 x 152 mm



Three phases, primary switched mode power supply

PC-0324-200-2

Electrical data	
Type	PC-0324-200-2
Input	
Input rated voltage	400 - 500 Vac
Input voltage range	320 - 575 Vac
Input voltage derating	-
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	3 x 1.21 A (400 Vac) / 1.03 A (500 Vac)
Starting current limiter	< 30 A, NTC
Input fuse internal	-
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	24 Vdc
Output voltage range	23 - 28,5 Vdc
Output rated current	20 A
Output limited current	typ. 22 A (constant current)
Power Boost	30 A / 5 s
Tripping of LS circuit breakers	max. B6/C6/K4 @ 6mm ² / 20m
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	4.03 W / 42.53 W (400 Vac)
Ripple factor	typ. 30 mVss
Efficiency	typ. 92 %
Resistance to reverse feed max.	35 Vdc
Over-voltage-protection	max. 40 Vdc
Signaling	
Status display	LED green
Signal output	Relay contact
Environment	
Cooling method	natural convection
Ambient temperature	-25°C ... +70°C
Storage temperature	-25°C ... +85°C
Derating	-2,5 %/K > +55° C
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
available from	July 2014
Order Number	PC-0324-200-2

Mechanical data	
Type	PC-0324-200-2
Input	
Terminals Input	Push-in Terminals, max 2.5 mm ²
Output	
Terminals Output	Push-In Terminals, max 6 mm ²
Signaling	
Terminals signaling	Push-in Terminals, max 2.5 mm ²
Environment	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	1.51 kg
Dimensions W x H x D	80 x 127 x 152 mm



Three phases, primary switched mode power supply

PC-0324-400-0

Electrical data	
Type	PC-0324-400-0
Input	
Input rated voltage	400 - 500 Vac
Input voltage range	320 - 575 Vac
Input voltage derating	-
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	3 x 2.15 A (400 Vac) / 1.82 A (500 Vac)
Starting current limiter	< 30 A, NTC
Input fuse internal	-
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	24 Vdc
Output voltage range	23 - 28,5 Vdc
Output rated current	40 A
Output limited current	typ. 44 A (constant current)
Power Boost	-
Tripping of LS circuit breakers	max. B10/C6/K4 @ 6/10mm ² /40m
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	2.78 W / 83.91 W (400 Vac)
Ripple factor	typ. 30 mVss
Efficiency	typ. 92.5 %
Resistance to reverse feed max.	35 Vdc
Over-voltage-protection	max. 40 Vdc
Signaling	
Status display	LED green
Signal output	Relay contact
Environment	
Cooling method	natural convection
Ambient temperature	-25°C ... +70°C
Storage temperature	-25°C ... +85°C
Derating	-2,5 %/K > +55°C
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
available from	August 2014
Order Number	PC-0324-400-0

Mechanical data	
Type	PC-0324-400-0
Input	
Terminals Input	Push-in Terminals, max 2.5 mm ²
Output	
Terminals Output	Push-In Terminals, max 16 mm ²
Signaling	
Terminals signaling	Push-in Terminals, max 2.5 mm ²
Environment	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	2.71 kg
Dimensions W x H x D	126 x 127 x 170 mm



Three phases, primary switched mode power supply PC-0324-400-2

Type	PC-0324-400-2
Electrical data	Input
	Input rated voltage 400 - 500 Vac
	Input voltage range 320 - 575 Vac
	Input voltage derating -
	Rated frequency range 44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load) 3 x 2.15 A (400 Vac) / 1.82 A (500 Vac)
	Starting current limiter < 30 A, NTC
	Input fuse internal -
	Recommended back-up fuse (circuit breaker) 6 A, 10 A, 16 A, characteristic B, C
	Transient surge voltage protection Varistor
	Output
	Output rated voltage 24 Vdc
	Output voltage range 23 - 28.5 Vdc
	Output rated current 40 A
	Output limited current typ. 44 A (constant current)
	Power Boost 60 A / 5 s
	Tripping of LS circuit breakers max. B10/C6/K4 @ 6/10mm ² /40m
	Parallel connection Yes
	Serial operation Yes
	Power dissipation, no load/rated load 2.78 W / 83.91 W (400 Vac)
	Ripple factor typ. 30 mVss
	Efficiency typ. 92.5 %
	Resistance to reverse feed max. 35 Vdc
	Over-voltage-protection max. 40 Vdc
	Signaling
	Status display LED green
	Signal output Relay contact
	Environment
	Cooling method natural convection
	Ambient temperature -25°C ... +70°C
	Storage temperature -25°C ... +85°C
	Derating -2.5 %/K > +55°C
	Required minimum spacing (left/right) -
	Required minimum spacing (over/under) 50 mm
	Safety and protection
	Protection index IP 20
	Safety class I, with PE connection
	Order numbers
	available from August 2014
	Order Number PC-0324-400-2

Type	PC-0324-400-2
Mechanical data	Input
	Terminals Input Push-in Terminals, max 2.5 mm ²
	Output
	Terminals Output Push-In Terminals, max 16 mm ²
	Signaling
	Terminals signaling Push-in Terminals, max 2.5 mm ²
	Environment
	Mounting position horizontal for standard rail DIN TH 35
	Measures and weights
	Weight 2.71 kg
	Dimensions W x H x D 126 x 127 x 170 mm

Electronic Circuit Breaker with thermomagnetic characteristic **PC-0724-480-0**



Advantages

Adjustable tripping current for each output channel via current selector switch accessible from the front
Ability to turn-on high load capacitance at each channel
Sequential and load-dependent switching-on of channels
Comprehensive single-channel-diagnostics and remote switching on/off of each output channel via 2-wire-interface
LED signalization and remote request for each output channel
Group alarm contact for simple diagnosis

Applications

ECONOMY SMART circuit breakers with a thermomagnetic characteristic represent an economical alternative to the classic circuit breaker. They also ensure reliable tripping even in the case of high line resistance. This makes the circuit breakers ideal for use in standard machine production. The electronic circuit breaker distributes and monitors the load current over several current circuits. Overloads and short circuits on an output are reliably recognized. The electronics permit brief current peaks and switch longer overloads off. The rated current for each output can be individually set with a current selector switch accessible from the front. The outputs are activated depending on the time delay and load to avoid an overload current. If the rated current is exceeded for a certain amount of time, the output will be switched off automatically and can be reactivated after a waiting time (thermal relaxation) using the pushbutton or the remote signal input S1. The pushbutton can also be used to switch the output manually. It is possible to read out the state of each output using the three signal contacts. The state of each output is also indicated with a multi-colored LED.

Standards

Safety:
EN 60950-1, EN 50178,
EN/IEC 60204-1

EMC:
EN 61000-6-2, EN 61000-6-3

Safety extra-low voltage (SELV/PELV):
IEC 60364-4-41 (DIN VDE 0100-410)

CE acc. to 2004/108/EG (EMC-Directive)

Approvals



UL 2367, UL 508, GL



Electronic Circuit Breaker with thermomagnetic characteristic

PC-0724-480-0

Electrical data

Type	PC-0724-480-0
Input	
Input rated voltage	24 Vdc
Input voltage range	18 - 30 Vdc
Maximal residual ripple of supplied input voltage	3 %
Required input voltage for turning-on of outputs	19.5 V (Turn-off Threshold 18 V)
Max. total input current	48 A
Max. input current for each pole of terminal	40 A
Over voltage protection	Suppressor diode 33 V
Stand-by current	48 mA @ 24 V
Power losses in stand-by mode	1.15 W @ 24 V
Output	
Output rated voltage	24 Vdc
Output rated current	8 x 1 - 6 A
Maximum voltage drop between input and output	155 mV @ 8 x 6 A
Initialization time of module	250 ms
Turn-on delay of outputs	Load dependent, min. 50 ms / max. 5 s
Waiting periode after switch-off of an output	500 ms (short circuit) .. 10 s (overload)
Max. power losses	8.6 W @ 8 x 6 A
Efficiency	99 %
Internal output fuse	15 A
Resistance to reverse feed max.	35 Vdc
Parallel use of outputs	Not allowed
Serial use of outputs	Not allowed
Signaling	
Status display	LED (red, green, orange)
Signal input S1	DC 24 V (On/Off/Reset)
Signal output S2	DC 24 V, max. 25 mA (status output channels)
Signal output S3	DC 24 V, max. 25 mA (Summation message)
Environment	
Storage temperature	-25° C ... +85° C
Ambient temperature	-25° C ... +70° C
Derating	-
Cooling method	Natural convection
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	40 mm
Safety and protection	
Protection index	IP 20
Safety class	III, without PE connection
Degree of pollution	2
Order numbers	
Order Number	PC-0724-480-0

Mechanical data

Type	PC-0724-480-0
Input	
Input terminals (2 x "-")	Push-In terminals, max. 2.5 mm ²
Input terminals (2 x "+")	Push-In terminals, max. 6 mm ²
Output	
Output terminals ("+"")	Push-In terminals, max. 2.5 mm ²
Signaling	
Terminals signaling	Push-In terminals, max. 2.5 mm ²
Terminal and mounting	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.40 kg
Dimensions W x H x D	42 x 127 x 116.5 mm

Subjects to change.



Electronic Circuit Breaker with thermomagnetic characteristic

PC-0724-800-0

Electrical data

Type	PC-0724-800-0
Input	
Input rated voltage	24 Vdc
Input voltage range	18 - 30 Vdc
Maximal residual ripple of supplied input voltage	3 %
Required input voltage for turning-on of outputs	19.5 V (Turn-off Threshold 18 V)
Max. total input current	70 A
Max. input current for each pole of terminal	40 A
Over voltage protection	Suppressor diode 33 V
Stand-by current	55 mA @ 24 V
Power losses in stand-by mode	1.32 W @ 24 V
Output	
Output rated voltage	24 Vdc
Output rated current	8 x 2 - 10 A
Maximum voltage drop between input and output	200 mV @ 8 x 10 A
Initialization time of module	250 ms
Turn-on delay of outputs	Load dependent, min. 50 ms / max. 5 s
Waiting periode after switch-off of an output	500 ms (short circuit) .. 10 s (overload)
Max. power losses	20 W @ 8 x 10 A
Efficiency	99 %
Internal output fuse	15 A
Resistance to reverse feed max.	35 Vdc
Parallel use of outputs	Not allowed
Serial use of outputs	Not allowed
Signaling	
Status display	LED (red, green, orange)
Signal input S1	DC 24 V (On/Off/Reset)
Signal output S2	DC 24 V, max. 25 mA (status output channels)
Signal output S3	DC 24 V, max. 25 mA (Summation message)
Environment	
Storage temperature	-25° C ... +85° C
Ambient temperature	-25° C ... +70° C
Derating	Max. output current per channel: 10 A Total current (all channels together): max. 50A @ 60°C max. 40A @ 70°C
Cooling method	Natural convection
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	40 mm
Safety and protection	
Protection index	IP 20
Safety class	III, without PE connection
Degree of pollution	2
Order numbers	
Order Number	PC-0724-800-0

Mechanical data

Type	PC-0724-800-0
Input	
Input terminals (2 x "-")	Push-In terminals, max. 2.5 mm ²
Input terminals (2 x "+")	Push-In terminals, max. 6 mm ²
Output	
Output terminals ("+"")	Push-In terminals, max. 2.5 mm ²
Signaling	
Terminals signaling	Push-In terminals, max. 2.5 mm ²
Terminal and mounting	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.40 kg
Dimensions W x H x D	42 x 127 x 116.5 mm

Subjects to change.



Electronic Circuit Breaker with thermomagnetic characteristic

PC-0724-800-1

Electrical data		Mechanical data	
Type	PC-0724-800-1	Type	PC-0724-800-1
Input		Input	
Input rated voltage	24 Vdc	Input terminals (2 x "-")	Pluggable, WAGO-Serie 721, max. 2.5 mm ²
Input voltage range	18 - 30 Vdc	Input terminals (2 x "+")	Pluggable, WAGO-Serie 831, max. 10 mm ²
Maximal residual ripple of supplied input voltage	3 %	Output	
Required input voltage for turning-on of outputs	19.5 V (Turn-off Threshold 18 V)	Output terminals ("+")	Pluggable, WAGO-Serie 721, max. 2.5 mm ²
Max. total input current	70 A	Signaling	
Max. input current for each pole of terminal	40 A	Terminals signaling	Pluggable, WAGO-Serie 721, max. 2.5 mm ²
Over voltage protection	Suppressor diode 33 V	Terminal and mounting	
Stand-by current	55 mA @ 24 V	Mounting position	horizontal for standard rail DIN TH 35
Power losses in stand-by mode	1.32 W @ 24 V	Measures and weights	
Output		Weight	0.40 kg
Output rated voltage	24 Vdc	Dimensions W x H x D	42 x 127 x 116.5 mm
Output rated current	8 x 2 - 10 A		
Maximum voltage drop between input and output	200 mV @ 8 x 10 A		
Initialization time of module	250 ms		
Turn-on delay of outputs	Load dependent, min. 50 ms / max. 5 s		
Waiting periode after switch-off of an output	500 ms (short circuit) ... 10 s (overload)		
Max. power losses	20 W @ 8 x 10 A		
Efficiency	99 %		
Internal output fuse	15 A		
Resistance to reverse feed max.	35 Vdc		
Parallel use of outputs	Not allowed		
Serial use of outputs	Not allowed		
Signaling			
Status display	LED (red, green, orange)		
Signal input S1	DC 24 V (On/Off/Reset)		
Signal output S2	DC 24 V, max. 25 mA (status output channels)		
Signal output S3	DC 24 V, max. 25 mA (Summation message)		
Environment			
Storage temperature	-25° C ... +85° C		
Ambient temperature	-25° C ... +70° C		
Derating	Max. output current per channel: 10 A Total current (all channels together): max. 50A @ 60°C max. 40A @ 70°C		
Cooling method	Natural convection		
Required minimum spacing (left/right)	-		
Required minimum spacing (over/under)	40 mm		
Safety and protection			
Protection index	IP 20		
Safety class	III, without PE connection		
Degree of pollution	2		
Order numbers			
Order Number	PC-0724-800-1		

Electronic Circuit Breaker with current limiting **PC-0824-480-0**



Advantages

Adjustable tripping current for each output channel via current selector switch accessible from the front
Selective immediate switch off of defective circuits in the event of critical supply voltage
Sequential and load-dependent switching-on of channels
Comprehensive single-channel-diagnostics and remote switching on/off of each output channel via 2-wire-interface
Further diagnoses of input voltage and the current of each circuit
Group alarm contact for simple diagnosis

Applications

The BASIC SMART circuit breakers guarantee maximum system availability. In the event of overload, only the faulty current paths are reliably switched off without affecting the remaining circuits thanks to active current limiting to 1.7 times the rated current. The electronic circuit breaker distributes and monitors the load current over several current circuits. Overloads and short circuits on an output are reliably recognized. The electronics permit brief current peaks and switch longer overloads off. The rated current for each output can be individually set with a current selector switch accessible from the front. The outputs are activated depending on the time delay and load to avoid an overload current. If the rated current is exceeded for a certain amount of time, the output will be switched off automatically and can be reactivated after a waiting time (thermal relaxation) using the pushbutton or the remote signal input S1. The pushbutton can also be used to switch the output manually. It is possible to read out the state of each output using the three signal contacts. The state of each output is also indicated with a multi-colored LED.

Standards

Safety:
EN 60950-1, EN 50178,
EN/IEC 60204-1

EMC:
EN 61000-6-2, EN 61000-6-3

Safety extra-low voltage (SELV/PELV):
IEC 60364-4-41 (DIN VDE 0100-410)

CE acc. to 2004/108/EG (EMC-Directive)

Approvals

UL 2367, UL 508, GL (in preparation)



Electronic Circuit Breaker with current limiting PC-0824-480-0

Electrical data

Type	PC-0824-480-0
Input	
Input rated voltage	24 Vdc
Input voltage range	18 - 30 Vdc
Maximal residual ripple of supplied input voltage	3 %
Required input voltage for turning-on of outputs	19.5 V (Turn-off Threshold 18 V)
Max. total input current	48 A
Max. input current for each pole of terminal	40 A
Over voltage protection	Suppressor diode 33 V
Stand-by current	48 mA @ 24 V
Power losses in stand-by mode	1.15 W @ 24 V
Output	
Output rated voltage	24 Vdc
Output rated current	8 x 0.5 - 6 A
Maximum voltage drop between input and output	155 mV @ 8 x 6 A
Initialization time of module	250 ms
Turn-on delay of outputs	Load dependent, min. 50 ms / max. 5 s
Waiting periode after switch-off of an output	500 ms (short circuit) .. 10 s (overload)
Max. power losses	8.6 W @ 8 x 6 A
Efficiency	99 %
Internal output fuse	15 A
Resistance to reverse feed max.	35 Vdc
Parallel use of outputs	Not allowed
Serial use of outputs	Not allowed
Signaling	
Status display	LED (red, green, orange)
Signal input S1	24 Vdc (On/Off/Reset)
Signal output S2	24 Vdc, max. 25mA (status output channels)
Signal output S3	24 Vdc, max 25mA (Summation message)
Environment	
Storage temperature	-25° C ... +85° C
Ambient temperature	-25° C ... +70° C
Derating	-
Cooling method	Natural convection
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	40 mm
Safety and protection	
Protection index	IP 20
Safety class	III, without PE connection
Degree of pollution	2
Order numbers	
Order Number	PC-0824-480-0

Mechanical data

Type	PC-0824-480-0
Input	
Input terminals (2 x "-")	Push-In terminals, max. 2.5 mm ²
Input terminals (2 x "+")	Push-In terminals, max. 6 mm ²
Output	
Output terminals ("+"")	Push-In terminals, max. 2.5 mm ²
Signaling	
Terminals signaling	Push-In terminals, max. 2.5 mm ²
Terminal and mounting	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.40 kg
Dimensions W x H x D	42 x 127 x 116.5 mm



Electronic Circuit Breaker with current limiting

PC-0824-480-1



Electrical data

Type	PC-0824-480-1
Input	
Input rated voltage	24 Vdc
Input voltage range	18 - 30 Vdc
Maximal residual ripple of supplied input voltage	3 %
Required input voltage for turning-on of outputs	19.5 V (Turn-off Threshold 18 V)
Max. total input current	48 A
Max. input current for each pole of terminal	40 A
Over voltage protection	Suppressor diode 33 V
Stand-by current	48 mA @ 24 V
Power losses in stand-by mode	1.15 W @ 24 V
Output	
Output rated voltage	24 Vdc
Output rated current	8 x 0.5 - 6 A
Maximum voltage drop between input and output	155 mV @ 8 x 6 A
Initialization time of module	250 ms
Turn-on delay of outputs	Load dependent, min. 50 ms / max. 5 s
Waiting periode after switch-off of an output	500 ms (short circuit) .. 10 s (overload)
Max. power losses	8.6 W @ 8 x 6 A
Efficiency	99 %
Internal output fuse	15 A
Resistance to reverse feed max.	35 Vdc
Parallel use of outputs	Not allowed
Serial use of outputs	Not allowed
Signaling	
Status display	LED (red, green, orange)
Signal input S1	24 Vdc (On/Off/Reset)
Signal output S2	24 Vdc, max. 25mA (status output channels)
Signal output S3	24 Vdc, max 25mA (Summation message)
Environment	
Storage temperature	-25° C ... +85° C
Ambient temperature	-25° C ... +70° C
Derating	-
Cooling method	Natural convection
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	40 mm
Safety and protection	
Protection index	IP 20
Safety class	III, without PE connection
Degree of pollution	2
Order numbers	
Order Number	PC-0824-480-1



Mechanical data

Type	PC-0824-480-1
Input	
Input terminals (2 x "-")	Pluggable, WAGO-Serie 721, max. 2.5 mm²
Input terminals (2 x "+")	Pluggable, WAGO-Serie 831, max. 10 mm²
Output	
Output terminals ("+"")	Pluggable, WAGO-Serie 721, max. 2.5 mm²
Signaling	
Terminals signaling	Pluggable, WAGO-Serie 721, max. 2.5 mm²
Terminal and mounting	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.40 kg
Dimensions W x H x D	42 x 127 x 1116.5 mm

Uninterruptible power supply **PC-1024-050-0**



Advantages

- Combinated power supply with loading and controlling unit
- Fast triggering of miniature circuit breakers
- Battery modules get detected automatically
- Assists the supply of industrial computers
- Extended life expectancy through temperature controlled battery management
- Interface to visualize and adjust relevant data
- Reliable supply of industrial PC's

Applications

The interruptible power supply PowerCompact contains an economic DC 24V/5A power supply with basic specifications for industrial computer and also for the loading and controlling unit for an ideal battery management.

Standards

Approvals



UL/CSA 60950 recognised (E213214), UL508 listed (E219022)
Germanischer Lloyd prepared



Uninterruptible power supply

PC-1024-050-0

Electrical data

Type	PC-1024-050-0
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	95 - 264 Vac (120 - 372 Vdc)
AC input derating	-1.5 % / Vac < 110 Vac
DC input derating	-1 % / Vdc < 150 Vdc
Rated frequency range	47 Hz - 63 Hz / 0 Hz
Input rated current (rated load)	1.96 A / 0.95 A (100 / 230 Vac)
Starting current limiter	< 30 A, NTC
Switch-on time	< 200 ms
Input fuse internal	4 A (time-lag)
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated current	5.00 A
Tripping of LS circuit breakers	max. B4
Parallel connection	Only with redundancy module, max. 5 A output current
Serial operation	Yes
Ripple factor	typ. 50 mVss
Output rated voltage	24 Vdc
Over-voltage-protection	typ. 38 Vdc
Rated output voltage (normal mode)	24 Vdc
Rated output voltage (buffer mode)	24 Vdc
Output voltage range (mains operation)	23 - 28.5 Vdc
Output voltage range (battery operation)	Battery voltage - 0.5 V (27.5 - 19 Vdc)
Output voltage limiting (mains operation)	typ. 6.5 A, constant current
Output voltage limiting (battery operation)	typ. 5.5 A, electronic
Power losses in mains operation (nominal load, battery charged)	22 W (100 Vac) 17W (230 Vac)
Max. power losses in battery operation (stand-by/nominal load)	3.2 W / 5.2 W
Storage medium	
Remote shutdown	Yes
Buffer period	1, 2, 3, 5, 10, 15, 20 Min, PC-Mode, Maximum, Individual
Reverse connection protection	Yes, (fuse in battery module trips)
Charging characteristic	3-stage charging process (IUoU charging characteristic)
Charging current	max. 0.6
End-of-charge voltage	26...29,5 V temperature-controlled, adjustable via interface
Check for presence of battery	1 per minute
Check remaining battery life	6 per hour
Deep discharge protection	19 Vdc
Warning threshold, battery almost flat	20.4 Vdc
Recommended battery modules	1.2 - 12 Ah
Parallel connection of battery modules	Yes, max. 3
Signaling	
Status display	3 LED green/yellow/red
Isolated group input	max. 30 V / 200 mA current limiting (in 3 separate signal outputs)
Alarm/Bat.Mode/Bat.Charge signal output	Relay, kill switch type, max. 30 V, function adjustable via interface
Environment	
Ambient temperature	-25° C ... +70°
Storage temperature	-25° C ... +85° C
Derating	-3 %/K > +50° C
Mounting position	horizontal for standard rail DIN TH 35
Cooling method	natural convection
Required minimum spacing (left/right)	-
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Resistance to reverse feed max.	35 Vdc
Order numbers	
Order Number	PC-1024-050-0

Mechanical data

Type	PC-1024-050-0
Input	
Terminals Input	Push-In, max 2.5 mm ²
Output	
Terminals Output	Push-In, max 2.5 mm ²
Storage medium	
Terminals Power storage device	Push-In, max 2.5 mm ²
Signaling	
Terminals signaling	Push-In, max 2.5 mm ²
Measures and weights	
Weight	0.80 kg
Dimensions W x H x D	60 x 127 x 126 mm

Subjects to change.



Werk 1 Factory 1



Werk 2 Factory 2



Forschung und Entwicklung

In unserer Forschungs- und Entwicklungsabteilung setzen sich über 40 Ingenieure und Fachkräfte Tag für Tag mit den unterschiedlichsten Gegebenheiten der Physik auseinander. So gelingt es uns, das hohe Qualitätsniveau aufrecht zu erhalten und unseren Innovationsvorsprung weiter auszubauen.

Research & Development

Every day, more than 40 engineers and specialists in our Research and Development department search for new ways to solve technical challenges using the laws of physics. Through their efforts, we are able to maintain a high standard of quality and keep building on our competitive advantage through innovation.



Produktionstechnik

Mit zukunftsweisenden Technologien setzt BLOCK Maßstäbe für eine prozessoptimierte Produktion. Flexible Fertigungseinheiten erlauben es uns vom Einzelstück bis zur Großserie schnell und effizient zu fertigen.

Production

Using cutting-edge technology, BLOCK sets the standard for optimised production processes. From single units to line production, our flexible manufacturing processes ensure quick and efficient operation.



Normen

Wir fertigen nach dem neuesten Stand der Technik und den entsprechenden Normen der jeweiligen Produktreihen.

Standards

We employ state of the art production in compliance with applicable standards for each product series.

BLOCK Transformatoren-Elektronik GmbH

Max-Planck-Straße 36-46 • 27283 Verden • Germany
Phone +49 4231 678-0 • Fax +49 4231 678-177
info@block.eu • block.eu