



PowerCon® - Locking 3 Pole Power Connectors



NAC3FCA



NAC3MPA



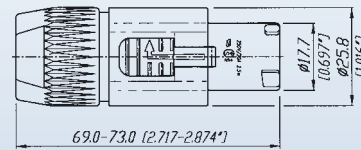
NAC3FCB



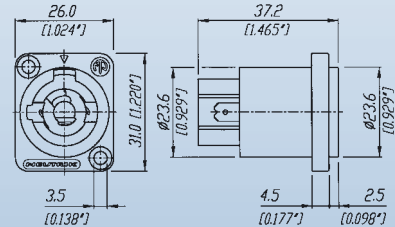
NAC3MPB

- Lockable 3 pole equipment (AC) connector with contacts for line, neutral and pre-mating safety ground
- High current capacity, rated at 20A / 250V ac.
Colour coded for easy identification, PowerCon® offers power-in (blue) and power-out (grey) versions with different keying to avoid the possibility of intermating
- Fast and easy locking system
- Extremely robust and reliable
- Excellent cable retention
- UL, cUL recognized components (file no. E 135070)
VDE certified (Reg. No. 6360),
SEV approved (No. 96.1 10096)

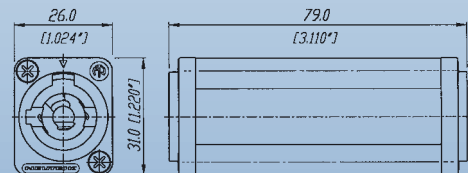
NAC3FCA(B)



NAC3MPA(B)



NAC3MM



t o i d e n t i f y t h e o r i g i n a l

Ordering Information

NAC3FCA	Cable connector, quick lock with securing lever, A-type for power inlet, screw terminals
NAC3MPA	Air tight chassis connector, A-type for power inlet, flat tab terminals
NAC3FCB	Cable connector, quick lock with securing lever, B-type for power outlet, screw terminals
NAC3MPB	Air tight chassis connector, B-type for power outlet, flat tab terminals
NAC3MM	Coupler for linking cables (couples NAC3FCA to NAC3FCB)

Accessories



NLFASTON



SCL



SCDR



Example: NAC3MPA + SCDR

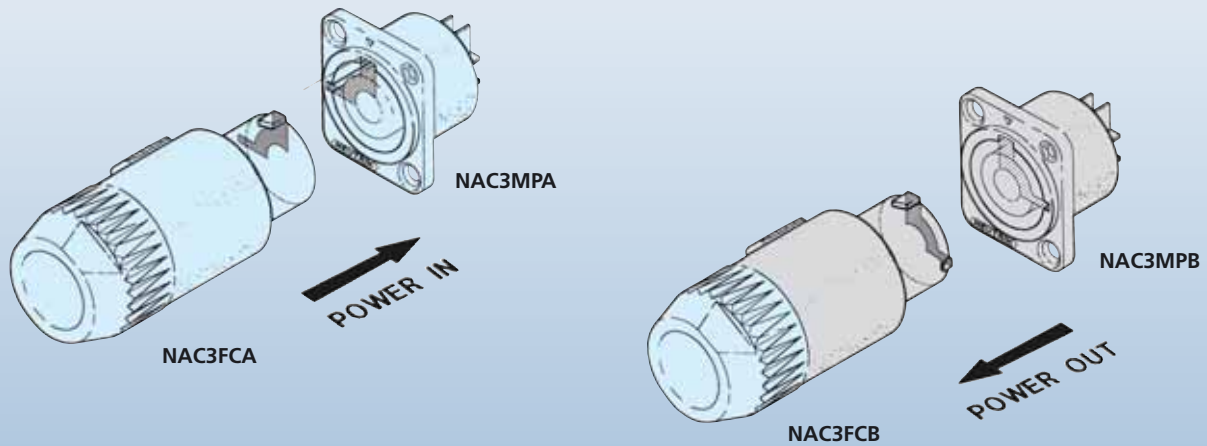


SCDX

NLFASTON	FASTON® receptacle for tabs with "positiv lock" for use with NL4MP, NL4MPR, NL8MPR, Pack of 100 pcs.
SCL	Plastic sealing cover to protect the connectors against dust and moisture
SCDR	Rear end protection cover for D-size chassis connectors
SCDX	Hinged cover seals D-size chassis connectors, IP54 rated

CODING

With the two non-interchangeable types of connectors (A type and B type) it is impossible to produce a short circuit. Mating connectors (combination) are identified by mechanical keyways and by color.



ATTENTION

The technical data of the PowerCon® connectors refer to connectors without breaking capacity, meaning connecting devices not to be engaged and disengaged in normal use when live or under load.

Technical Data

Specifications	PowerCon® Series	NanoCon® Series	MiniCon Series	Neutricon® Series
Electrical				
Number of contacts:	2 + PE	3	12 (1-12 modular system)	8 (1-8 modular system)
Rated current per contact:	20 A rms	2 A	3 A	7.5 A (solder), 5 A (crimp)
Rated voltage:	250 V ac	50 V ac	50 V ac	50 V ac
Dielectric strength:	4000 V dc	1000 V dc	1000 V dc	1500 Vdc
Contact resistance:	≤ 3 mΩ	≤ 12 mΩ	≤ 8 mΩ	≤ 5 mΩ
Insulation resistance after damp heat test (IEC 68-2-30):	> 100 MΩ	> 1 GΩ	> 500 MΩ	> 500 MΩ
Mechanical				
Retention method:	latch lock	latch	Push-pull	Push-pull
Cable O.D. range:	5 - 15 mm	3.4 mm max.	3 - 5 mm (grey chuck) 5 - 7 mm (white chuck) 2.5 - 6 mm (crimp version MSRC)	3 - 7 mm 3 - 3.8 mm (SR8A) 6 - 7 mm (SR8B)
Wiring:	Cable: screw type terminals or soldering 2.5 mm ² / 14 AWG Chassis: flat tabs for FASTON® 4.8 x 0.5 mm or soldering	0.2 mm ² / 24 AWG for solid wire 0.14 mm ² / 26 AWG for stranded wire	0.5 mm ² / 20 AWG for solder 0.22 mm ² / 24 AWG for crimp	1.0 mm ² / 18 AWG for solder 0.14 - 0.34 mm ² / 22-26 AWG for crimp
Solderability complies with IEC 68-2-20:	•	•	•	•
Materials				
Housing cable connector:	PA 6 30% GR	CuSn4Pb4Zn4	ZnAl4Cu1 / CuZn39Pb3	ZnAl4Cu1 gal Ni or black chrome
Housing receptacle:	PA 6 30% GR	CuZn39Pb2	ZnAl4Cu1	ZnAl4Cu1, gal Ni or black chrome
Insert:	PA 6 30% GR	PETP	PA 6.6	PBTP 15% GR
Contacts:	CuZn39Pb3 / CuSn6	CuZn35Pb2	CuZn35Pb2 (solder) CuZn39Pb3 (crimp) CuSn6	CuZn35Pb2 (solder) CuZn39Pb3 (crimp)
Contact surface:	4 μm / 20 μm Ag plated	0.5 μm Au	0.2 μm AuCo	0.3 μm Au hard alloy over 2 μm Ni
Chuck POM:	•	•	•	•
Environmental				
Flammability UL 94 HB:	•	UL 94 V-0	UL 94 V-0	•
Temperature range: -30°C to +80°C	•	•	•	•
Protection class (mated):	IP 20	IP 40	IP 5X	IP5X
Safety Requirements EN/IC61984:	•	-	-	-

FASTON® is a trademark of AMP Inc.

t o i d e n t i f y t h e o r i g i n a l

NEW
TENTATIVE

PowerCon® 32 Amp

For demanding power transfer and load

Q u a l i t y T h i n k i n g



- *Locking single phase AC appliance coupler*
- *High current capacity (32 A rated)*
- *Fast and easy locking system*
- *Excellent cable handling and protection*
- *Extremely robust and reliable*

Q u a l i t y D e s i g n



NEUTRIK®

CONNECTING THE WORLD

Applications

The 32 Amp ac installation coupler is conceived as a non-standardized 3 pole connection system without breaking capacity to serve the needs of high power distribution systems and supplies for professional audio and lighting equipment and installations. The system consists of two connectors - a chassis receptacle and a rewirable cable connector with locking mechanism. The connectors comprise of contacts for phase, neutral and protective earth (ground) conductors rated for currents up to 32 A and for voltages up to 250V.

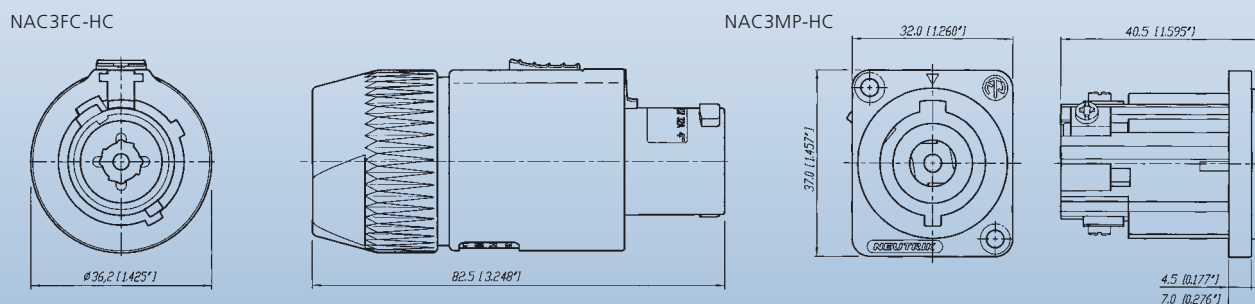
The coupler features:

- 250 V ac, 32 Amp single-phase (for ambient temperatures up to 35°C)
- Premating contact for protective earth
- Locking system to prevent unintentional disengagement
- Cable O.D. Range: 8 - 20 mm
- Wiring with screw-type terminals for wires 2.5 to 6.0 mm² (AWG 14 - 10)

Technical Data

Electrical		Materials	
Rated current:	32 A rms	Housing: - Cable Connector	Polyamide PA 6 30% GR
Rated voltage:	250 V ac	- Receptacle	Polyamide PA 6.6 25 % GR
Insulation resistance:	> 10 GΩ	Insert:	Polyamide PA 6.6 25 % GR
Dielectric strength:	4 kV peak	Contacts: - Cable Connector	Brass (CuZn39Pb3)
Contact resistance:	≤ 3 mΩ	- Receptacle	Bronze (CuSn0.2)
Creepage distance:	> 3 mm	Contact plating:	4 μm Ag
Safety Ground:	Premating	Locking Element:	Zinc diecast (ZnAl4Cu1)
Safety Standard:	JET approved, VDE and UL applied	Strain Relief:	Polyacetal (POM)
		Bushing:	Polyamide PA 6 15% GR
Mechanical		Environment	
Retention method:	Quick lock	Temperature range:	-25°C to +70°C
Life time (mating cycles):	> 1'000 cycles without load	Flammability:	UL 94 HB – plug housing UL 94 V-0 – socket housing + plug insert
Cable O.D. range:	8 - 20 mm	Overvoltage Category:	III
Wiring:	Screw type terminals	Pollution Degree:	2
- Cable Connector	2.5 - 6.0 mm ² (14 - 10 AWG)	Protection Degree:	IP 2x unmated
- Receptacle	2.5 - 6.0 mm ² (14 - 10 AWG)		

Dimensional Drawing



Ordering Information

NAC3FC-HC	PowerCon [®] 32 Amp cable connector
NAC3MP-HC	PowerCon [®] 32 Amp chassis connector

