

Charging Contacts

Nano, Nano+ & Enduro+ Series

for AGVs, Shuttles, Industrial Lift Trucks and more

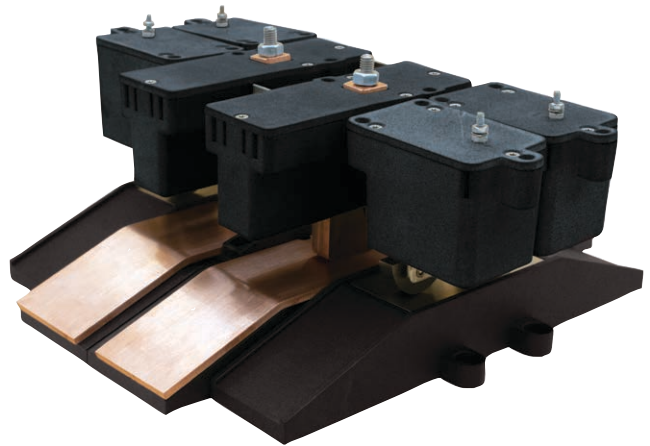
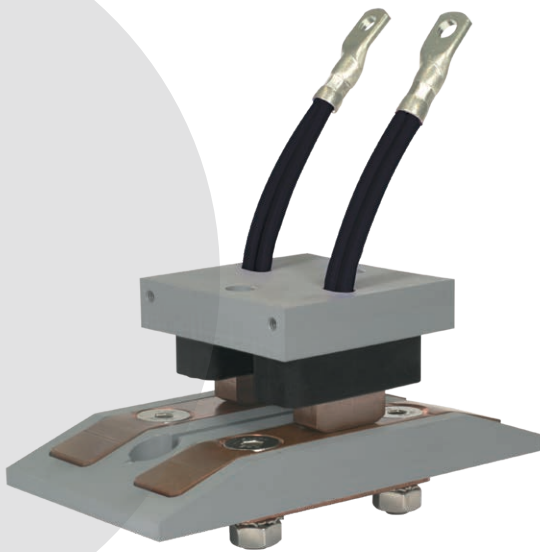


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Overview & Design Features

Conductix-Wampfler brings our extensive knowledge of mobile industrial electrification to Charging Contact solutions. Charging Contacts maximize operational time by providing a physical connection to charge batteries or capacitors quickly. Fleet applications use fast charging to reduce the total number of vehicles needed and maximize uptime. Opportunity charging applications can quickly charge at momentary stops during process including staging areas, workstation, and loading/unloading stations keeping vehicles on the floor. Faster charging maximizes ROI and eliminates the need for manual or automated battery swaps. Charging contacts are great for both automated and manned applications as they eliminate the need for operators to remember to plug in equipment when not in use. Profitability and productivity are optimized.

Long Life

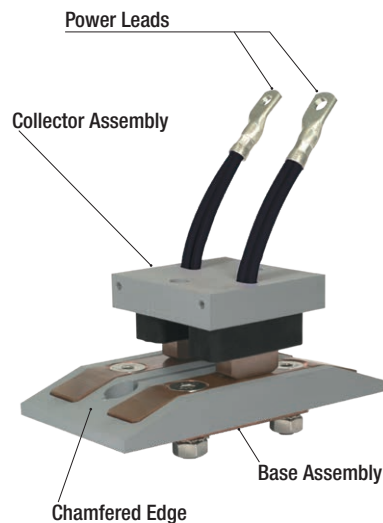
Our Charging Contacts are designed for long life. The chamfered design on the base plate ensures that our brush only contacts the copper contact when engaging and disengaging from the base plate. This design ensures that plastic base plate material is not worn and deposited on the base charging contact. This allows us to maintain consistent engagement of the collector and the base plate contact ensuring charging integrity. Our unique design allows for problem free operation of the charging contacts.

Compact and Modular

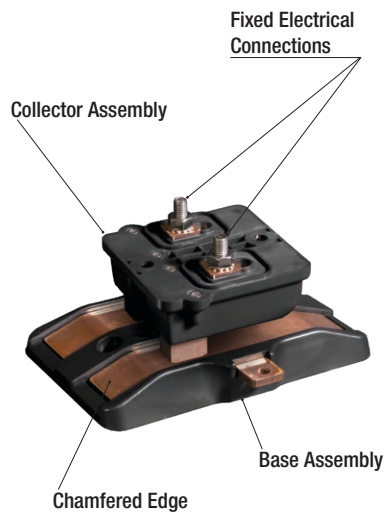
Our innovative design maximizes misalignment tolerances and current capabilities for a compact solution. We understand that space is at a premium in many applications, so we designed the charging contacts with these needs in mind. The modular design of our components allows for design flexibility in conductor placement to meet your electrical charging needs.

Side by Side Features

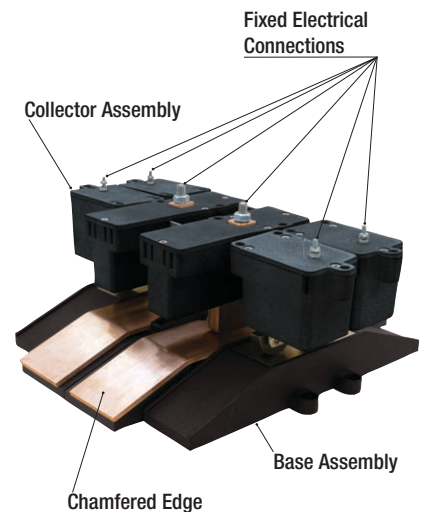
Nano



Nano+



Enduro+



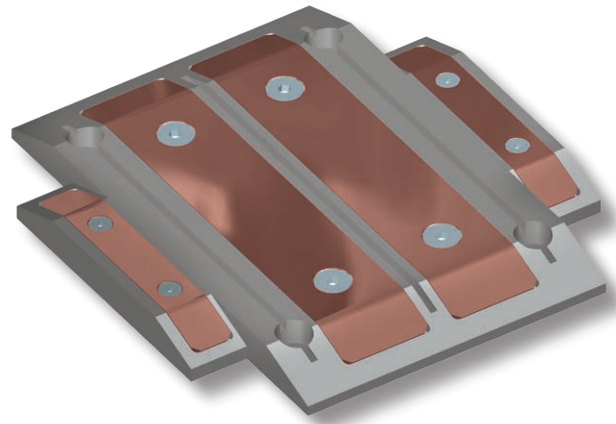
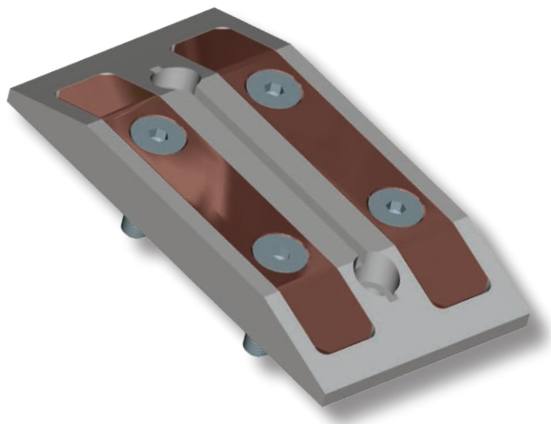
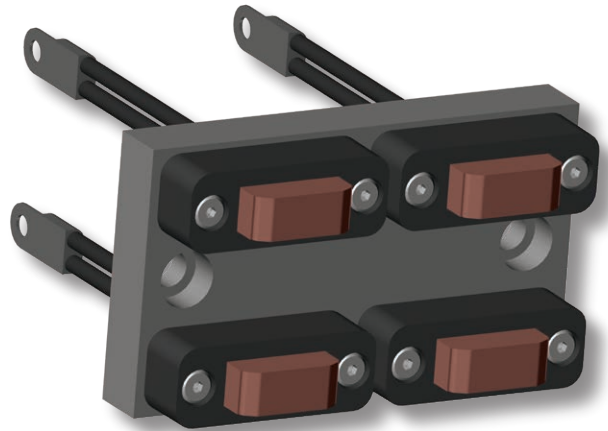
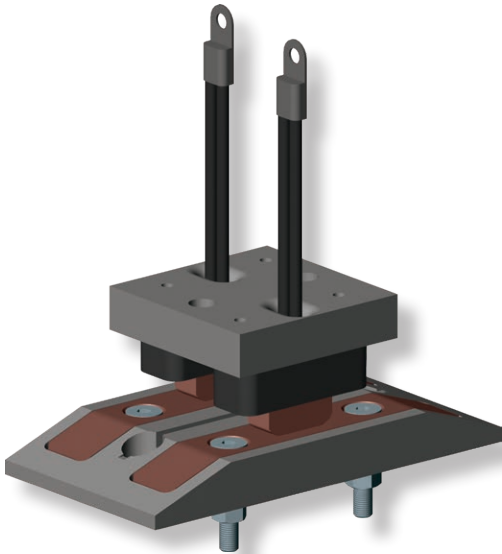
Nano Series

Conductix-Wampfler's **Nano Series** of Charging Contacts provides a compact solution for charging systems.

The **Nano Series** offers a smaller footprint when compared to other charging contacts in the market with up to a 75% smaller collector and up to a 66% smaller base plate. With a chamfered edge design the **Nano Series** ensures that only long-life wear-resistant components meet each other. The **Nano Series** Charging Contact is a compact, modular design ideal for applications where space is a premium.

Markets and Applications

- Manufacturing
- Warehouse & Distribution
- Automotive
- AGVs
- AGCs
- AMRs
- Shuttles
- Amusement Rides
- Service Robots
- Industrial Lift Trucks
- Custom Engineered Configurations

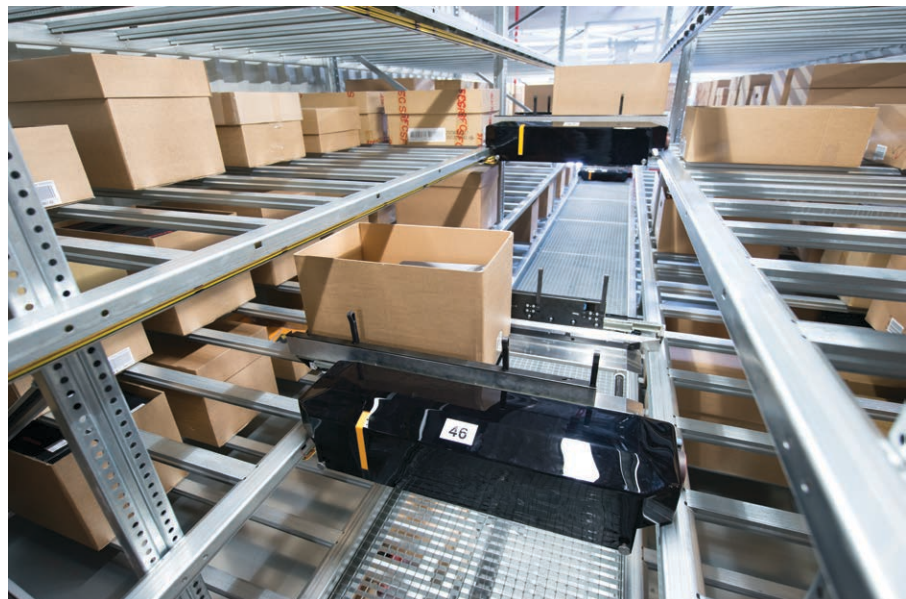


Nano Series

Amperages, Options and Part Numbers

Nano Series Charging Contacts come in a wide range of Amperages. Parts can be purchased as a system or as single parts allowing multiple collectors to utilize one base plate with opportunity charging.

Amperage		Part No.		
100% Duty Cycle	50% Duty Cycle	System (1 Collector +1 Base)	Collector Only	Base Plate Only
20 A	40 A	XA-BCL020A2WO	XA-BCC020A2WO	XA-BCB020A2WO
50 A	100 A	XA-BCL050A2WO	XA-BCC050A2WO	XA-BCB050A2WO
75 A	150 A	XA-BCL075A2WO	XA-BCC075A2WO	XA-BCB075A2WO
100 A	200 A	XA-BCL100A2WO	XA-BCC100A2WO	XA-BCB100A2WO
150 A	300 A	XA-BCL150A2WO	XA-BCC150A2WO	XA-BCB150A2WO
200 A	400 A	XA-BCL200A2WO	XA-BCC200A2WO	XA-BCB200A2WO
300 A	600 A	XA-BCL300A2WO	XA-BCC300A2WO	XA-BCB300A2WO
200 A + 20 A	400 A + 40 A	XA-BCL200A2WP	XA-BCC200A2WP	XA-BCB200A2WP
300 A + 20 A	600 A + 40 A	XA-BCL300A2WP	XA-BCC300A2WP	XA-BCB300A2WP



Nano Series

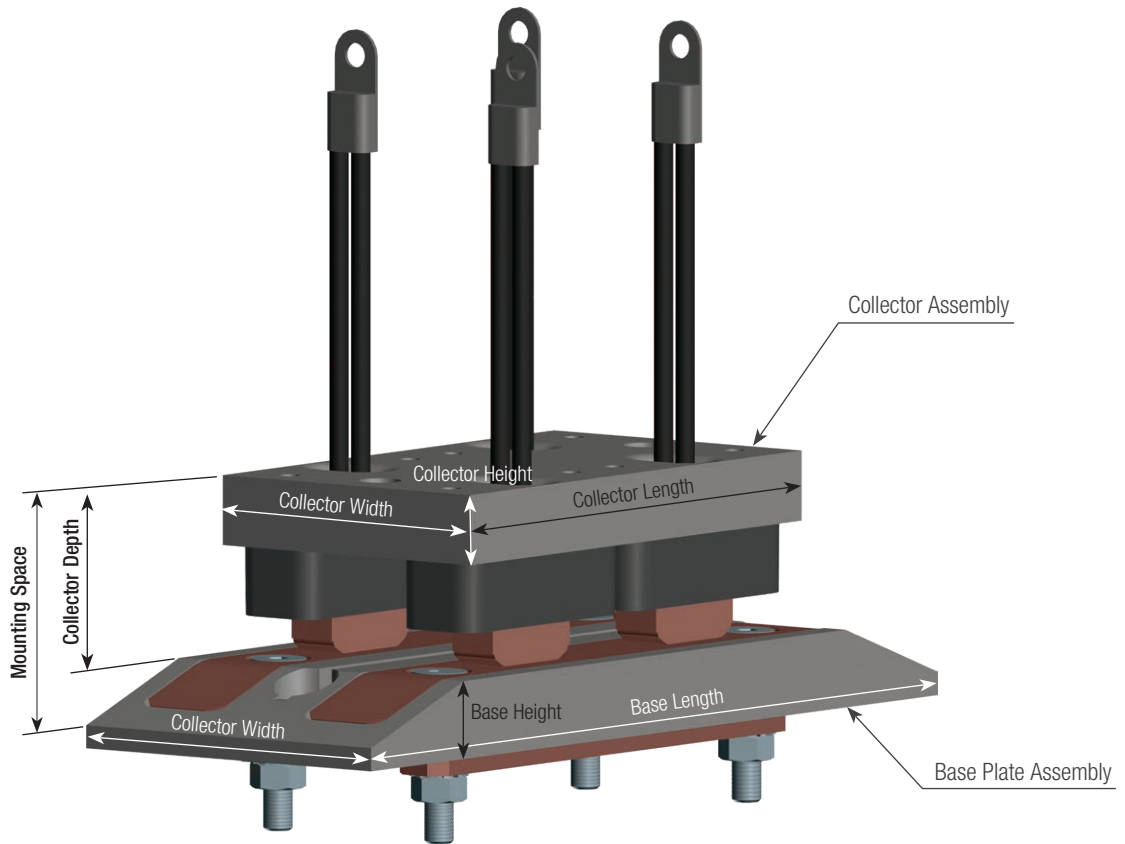
Technical Specifications

- Design compliant UL 583 recognized component, ensuring the highest level of safety and reliability in industrial environments.
- Charging contact for dry interior installations with operating voltage 12- 60 V DC or up to 25 V AC. If used for ELV and SELV applications, requirements of the voltage source and precautions regarding ELV and SELV guidelines need to be observed.
- Single and two phase systems
- Optional pilot contacts
- Voltages up to 60 V DC / 25 V AC
- Ampacities from 20A to 300A (100% duty cycle)
- Operating temperature range: -20° C to +50° C
- Positional tolerance: X: ± 5 mm | Y: ± 5 mm | (Z axis) depression: - 1mm with 4mm of travel

Drawings and 3D-Models are available on request.

Amperage		Part No.		Length - in. (mm)
100% Duty Cycle	50% Duty Cycle	Collector	Base Plate	
20 Amp	40 Amp	XA-BCC020A2W0		2.25 (57.2)
			XA-BCB020A2W0	5.00 (127)
50 Amp	100 Amp	XA-BCC050A2W0		2.50 (63.5)
			XA-BCB050A2W0	5.50 (139.7)
75 Amp	150 Amp	XA-BCC075A2W0		3.00 (76.2)
			XA-BCB075A2W0	5.75 (146.1)
100 Amp	200 Amp	XA-BCC100A2W0		4.31 (109.6)
			XA-BCB100A2W0	7.38 (187.3)
150 Amp	300 Amp	XA-BCC150A2W0		4.81 (122.3)
			XA-BCB150A2W0	7.88 (200)
200 Amp	400 Amp	BCC200A2W0		4.31 (109.6)
			XA-BCB200A2W0	8.50 (215.9)
300 Amp	600 Amp	XA-BCC300A2W0		4.81 (122.3)
			XA-BCB300A2W0	8.13 (206.4)
200 Amp + 20 Amp	400 Amp + 40 Amp	XA-BCC200A2WP		4.31 (109.6)
			XA-BCB200A2WP	8.50 (215.9)
300 Amp + 20 Amp	600 Amp + 40 Amp	XA-BCC300A2WP		4.81 (122.3)
			XA-BCB300A2WP	8.13 (206.4)

Nano Series



	Width - In. (mm)	Collector Depth - in. (mm) (uncompressed)	Base Height - in. (mm)	Mounting Space - in. (mm)
	2.25 (57.2)	1.53 (38.9)	0.56 (1.43)	1.97 (50.1)
	2.50 (63.5)			
	2.50 (63.5)	1.53 (38.9)	0.63 (16.0)	2.00 (51.7)
	2.88 (73)			
	3.00 (76.2)	1.59 (40.5)	0.63 (16.0)	2.10 (53.3)
	3.19 (81)			
	2.50 (63.5)	1.53 (38.9)	0.63 (16.0)	2.00 (51.7)
	2.88 (73)			
	3.00 (76.2)	1.59 (40.5)	0.63 (16.0)	2.10 (53.3)
	3.19 (81)			
	5.00 (127)	1.59 (40.5)	0.63 (16.0)	2.12 (53.9)
	4.75 (120.7)			
	6.63 (168.3)	1.59 (40.5)	0.73 (18.6)	2.22 (56.4)
	5.30 (134.6)			
	7.25 (120.7)	1.59 (40.5)	0.63 (16.0)	2.10 (53.3)
	7.80 (198.1)			
	8.13 (206.4)	1.59 (40.5)	0.75 (19.1)	2.22 (56.4)
	8.56 (217.4)			

Nano+ Series

The **Nano+ Series** offers an off-the-shelf, cost effective solution at 5 amp-25 amp, 50 amp, and 75 amp configurations.

The **Nano+** is built on the same industry-first zero maintenance chamfered edge base and combines that with the patent-pending shunt technology found on the **Enduro+** that has been tested for over 1 Million worry-free cycles. Highly tolerant to misalignment, our **Nano+** Charging Contacts are effective for a wide range of battery-powered equipment, such as automated guided vehicles (AGVs).

Markets and Applications

- Manufacturing
- Warehouse & Distribution
- Automotive
- AGVs
- AGCs
- AMRs
- Shuttles
- Amusement Rides
- Service Robots
- Industrial Lift Trucks



Nano+ Series

Amperages, Options and Part Numbers for Collectors

Nano+ Series Charging Contacts come in 5-25, 50, and 75 Amperages

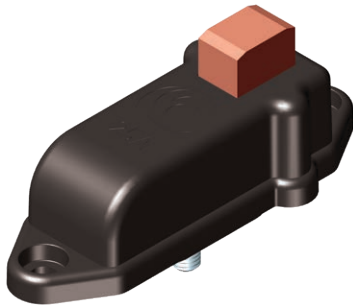
NOTE: Example collector part numbers are shown below. Please contact sales.us@conductix.com to discuss your specific application.



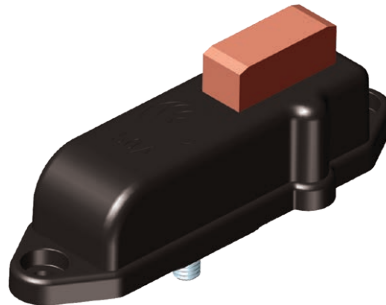
XA-CCB075A2BW0 - Bottom Base Assembly 75A



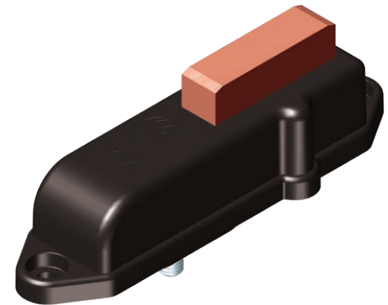
XA-CCB075A2SW0 - Side Base Assembly 75A



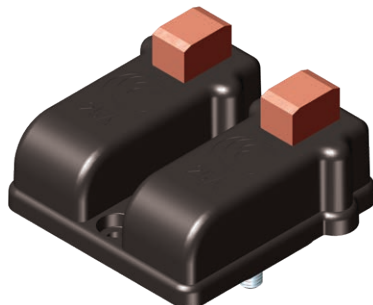
XA-CCC025A1W0
Single Collector Assembly 5A-25A



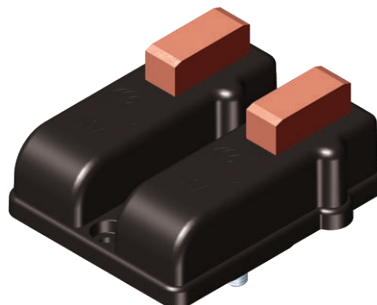
XA-CCC050A1W0
Single Collector Assembly 50A



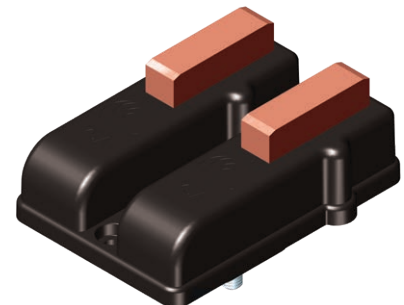
XA-CCC075A1W0
Single Collector Assembly 75A



XA-CCC025A2W0
Double Collector Assembly 5A-25A



XA-CCC050A2W0
Double Collector Assembly 50A



XA-CCC075A2W0
Double Collector 75A

Nano⁺ Series

Technical Specifications

- Design compliant with UL 583 recognized component.
- Charging contact for dry interior installation with operating voltage 12-60 V DC or up to 25 V AC. If used for ELV or SELV applications, requirements of voltage source and precautions regarding ELC and SELV guidelines need to be observed.
- Single and two-phase systems
- Voltages up to 60 V DC / 25 V AC
- Ampacities from 5 Amp-25 Amp, 50 Amp, 75 Amp
- Operating temperature range: -30° C (-22°F) to +130° C (266°F)
- Positional tolerance: X: ± 5 mm | Y: ± 28 mm | (Z axis) depression: - 1mm with 4mm of travel

Drawings and 3D-Models are available on request.

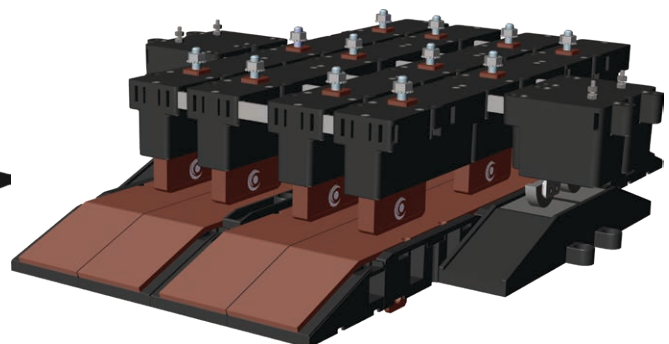
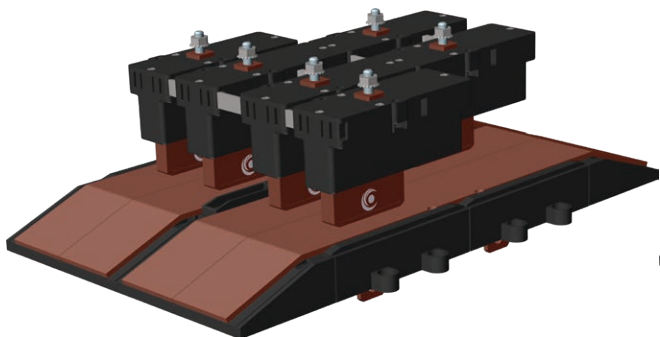
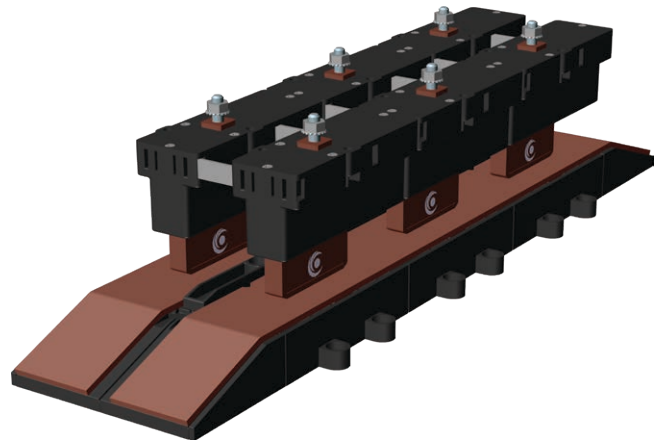
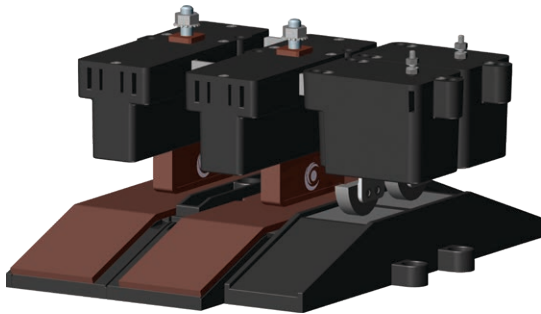
Enduro+ Series

Conductix-Wampfler's **Enduro+ Series** of Charging Contacts maximize productivity by capitalizing on opportunity charging wherever equipment is stationary.

The **Enduro+** Charging Contacts allow for equipment to be charged at current capacities of 100 to 600 amps maximizing uptime and ROI. These durable charging contacts have a wear-resistant chamfered edge that provides a high charging rate while also reducing the negative impact of debris. Highly tolerant to misalignment, our **Enduro+** Charging Contacts are effective for a wide range of battery-powered equipment, such as automated guided vehicles (AGVs), automated guided carts (AGCs), shuttles, industrial fork lifts, and more.

Markets and Applications

- Manufacturing
- Warehouse & Distribution
- Automotive
- AGVs
- AGCs
- AMRs
- Shuttles
- Amusement Rides
- Service Robots
- Industrial Lift Trucks



Enduro+ Series

Amperages, Options and Part Numbers for Collectors

Enduro+ Series Charging Contacts come in a wide range of Amperages. Parts are purchased as singles allowing multiple collectors to utilize one base plate with opportunity charging. The Enduro+ Series utilizes Conductix-Wampfler's Smart Part Numbering System, an example of a part number breakdown is below.



Part No. Collector = XA-MCCXXXX-PX

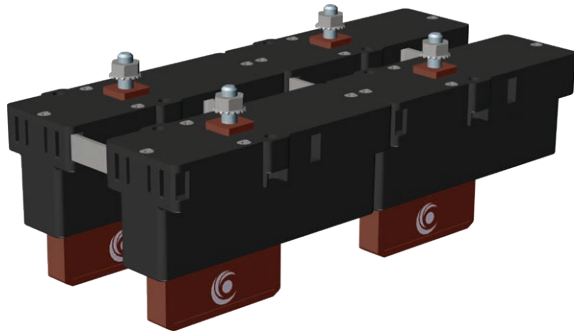
Amperage	
100S - Standard	300L - 300 Long
200W - 200 Wide	400B - 400 Both
200L - 200 Long	600B - 600 Both

Wire Feed
T - Top

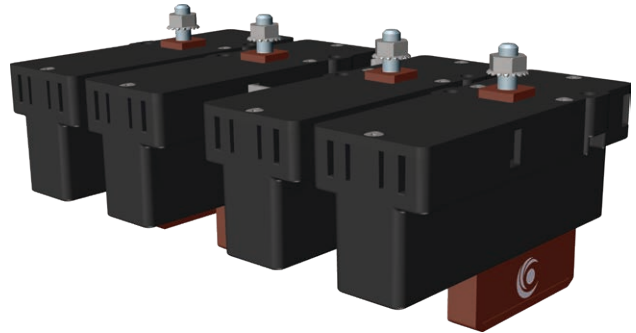
Pilot
P0 - None
P1 - One Pilot
P2 - 2 Pilots

NOTE: Example collector part numbers are shown below. Please contact sales.us@conductix.com to discuss your specific application.

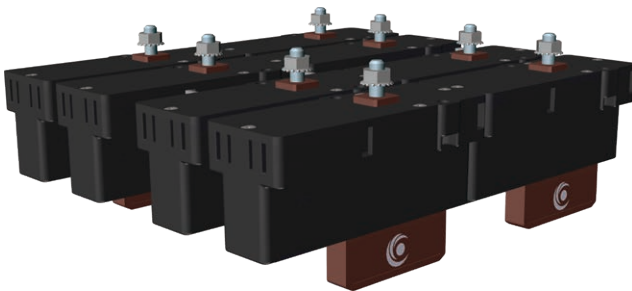
XA-MCC200LT-PO 200 Amp long, top wire feed, no pilot



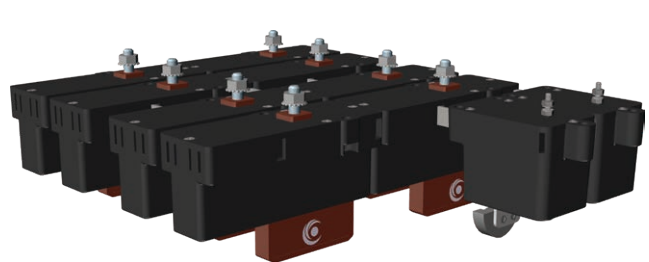
XA-MCC200WT-PO 200 Amp wide, top wire feed, no pilot



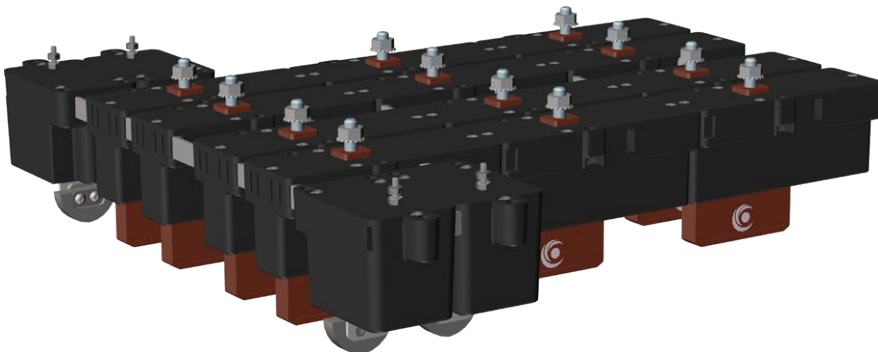
XA-MCC400BT-PO 400 Amp both, top wire feed, no pilot



XA-MCC400BT-P1 400 Amp both, top wire feed, one pilot



XA-MCC600BT-P2 600 Amp both, top wire feed, two pilots



Enduro+ Series

Amperages, Options and Part Numbers for Bases

The Enduro+ Series utilizes Conductix-Wampfler's Smart Part Numbering System, an example of a part number breakdown is below.



Part No. Base = XA-MCBXXXX-PX



NOTE: Example base part numbers are shown below. Please contact sales.us@conductix.com to discuss your specific application.

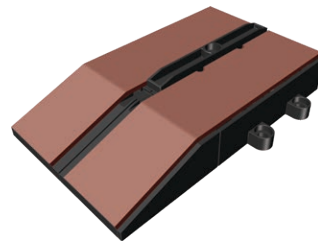
XA-MCB100SBT-P0

100 Amp standard, bottom wire feed, through travel, no pilot



XA-MCB100SRE-P0

100 Amp standard, rear wire feed, entry ramp, no pilot



XA-MCB100SST-P0

100 Amp standard, single side, through travel, no pilot



100 XA-MCB100SBF-P0

100 Amp standard, bottom wire feed, flat, no pilot



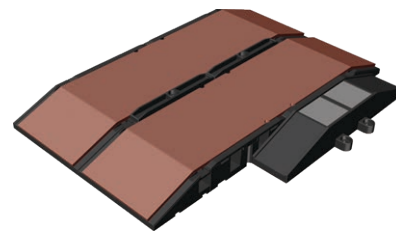
XA-MCB400BBT-P0

400 Amp both, bottom wire feed, through travel, no pilot



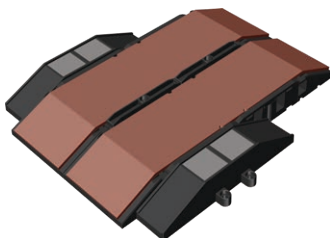
XA-MCB400BBT-P1

400 Amp both, bottom wire feed, through travel, one pilot



XA-MCB400BBT-P2

400 Amp both, bottom wire feed, through travel, two pilots



Enduro+ Series

Technical Specifications

- UL recognized component for standard UL583 Electric-Battery-Powered Industrial Trucks
- Charging contact for dry interior installations with operating voltage 12- 60VDC or up to 25VAC. If used for ELV and SELV applications, requirements of the voltage source and precautions regarding ELV and SELV guidelines need to be observed.
- Single and two phase systems
- Optional pilot contacts
- CANbus tested pilots
- Voltages up to 60VDC / 25VAC
- Ampacities from 100A to 600A (100% duty cycle)
- Operating temperature range: -30° C to +120° C
- Positional tolerance: X: ± 15 mm | Y: ± 15 mm | (Z axis) Depression: 2mm with 18mm of travel
- Our Pilot signal offering allows signaling before ramping up amperage for high current applications

Drawings and 3D-Models are available on request



Notes

www.conductix.us

Conductix-Wampfler

has just one critical mission:
To provide you with energy and
data transmission systems that
will keep your operations up and
running 24/7/365.

To contact your nearest sales
office, please refer to:

www.conductix.contact

