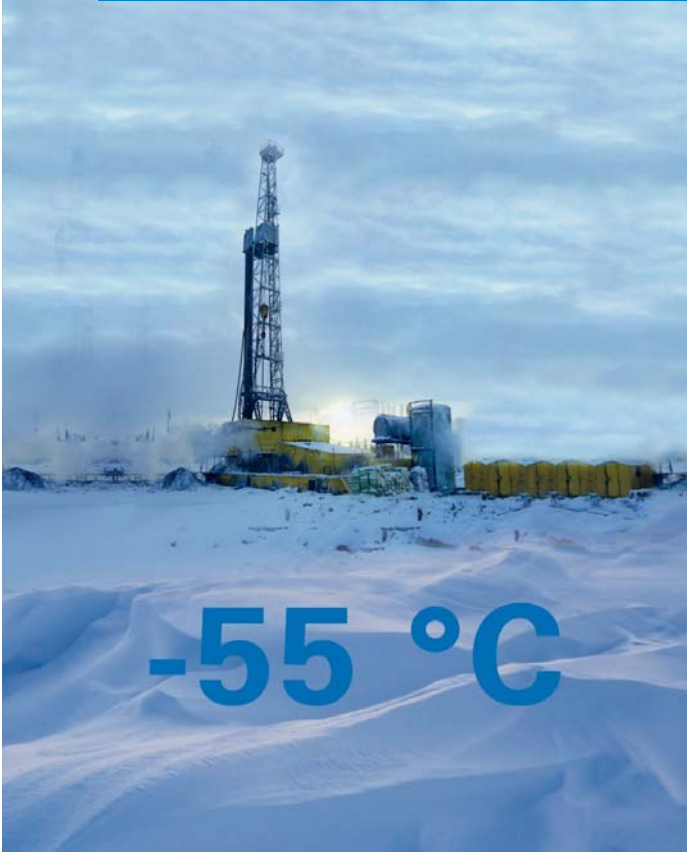
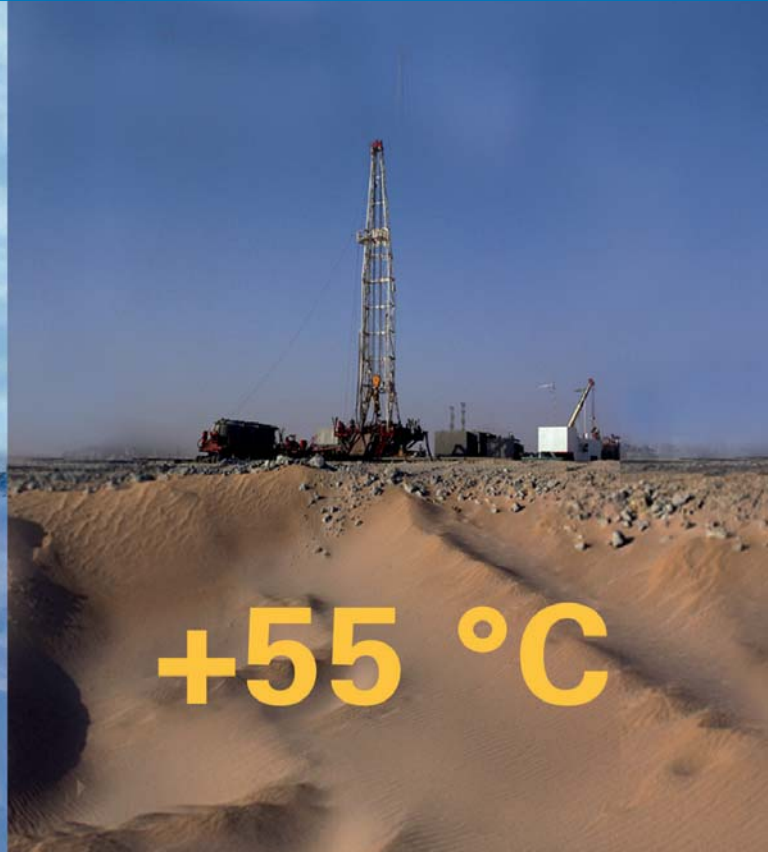


Explosion protected plugs & receptacles



**-55 °C**



**+55 °C**

## Extended Temperature Range

Ex-plugs & receptacles 16 A and 63 A for Zone 1 and 21



# EATON

*Powering Business Worldwide*

# Plug in with GHG51

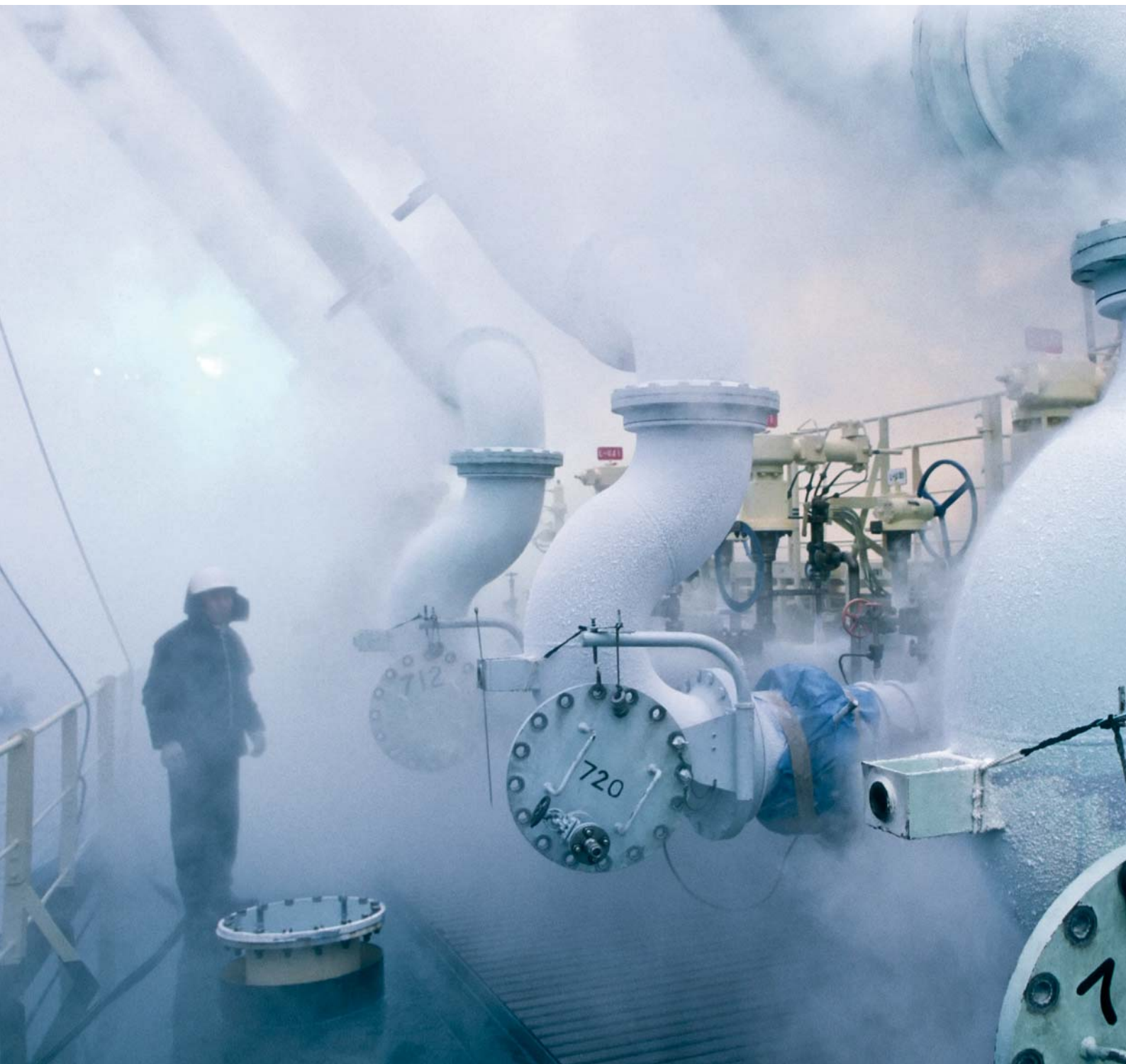
IEC 60309 plugs and interlocks for hazardous environments

Eaton's Crouse-Hinds GHG 51 series IEC 60309 plugs are IP66 rated and engineered to provide secure, safe and waterproof connections in the toughest conditions.

## **Even tougher.**

Now with an expanded temperature range of -55°C to +55°C for use in extreme conditions.

- Expanded temperature range
- Easy to install
- Impact resistant enclosure
- Low engagement force
- IP66 compliant when plugged in
- Self-cleaning lamellar contacts
- Low transition resistance between plug and receptacle



# Overview



## Plugs

### Applications:

- For extreme low temperatures (Yamal)
- For extreme high temperatures (Middle East)
- Where complete protection against dirt, dust and water jets is required
- In areas prone to vibration, hard use, and abuse
- In environments that demand safety, ease of use, reliability, and durability
- Ideal for hazardous areas or heavy duty industrial applications, such as: chemical/petrochemical, refineries, shipyards, military, marine/marina environments, pulp and paper, heavy manufacturing, wastewater treatment, portable power

### Features:

- Voltage, configured, colour coded
- Watertight
- Impact- and corrosion-resistant
- Innovative finger lock keeps cord grip secured
- Positive grommet seal system at cord entry
- Lockout/tagout
- High grade nickel-plated brass pins
- Multi-lam sleeve bands, nickel plated beryllium copper

### Certifications and compliances:

- IEC60309-1 and IEC60309-2
- IEC/EN 60079
- IP66 IEC 60529
- II 2G/Ex db eb IIC/IIB Gb
- II 2D Ex tb IIIC/IIIB Db

### Standard materials:

- Enclosure - polyamide
- External hardware - stainless steel
- Contacts - brass, nickel-plated beryllium copper
- Contact carrier - glass fibre reinforced nylon PA66

## Wall sockets

### Applications:

- To supply power to portable or fixed electrical equipment, such as welders, motor generator sets, compressors, conveyors, portable tools, lighting systems, and similar equipment
- In hazardous rated areas, damp or corrosive atmospheres, wet locations or hose down areas

### Features:

- Mechanically interlocked dead-front receptacle prevents plug from disengaging under load
- Enclosure has continuous form-in-place gasket
- Meets OSHA's lockout/tagout requirements - can be padlocked in "OFF" position
- Internal switch with full AC 3 switching ability (motor-load)

### Certifications and compliances:

- IEC60309-1 and IEC60309-2
- IEC/EN 60079
- IP66 IEC 60529
- II 2G/Ex db eb IIC/IIB Gb
- II 2D Ex tb IIIC/IIIB Db

### Standard materials:

- Enclosure - glass fibre reinforced polyester (GRP)
- External hardware - stainless steel
- Contacts - brass, nickel plated beryllium copper
- Contact Carrier - glass fibre reinforced nylon PA66



## Ex-plugs & receptacles 16A 3/4/5-pole up to 690 V



Wall socket



Plug

### Technical data

#### Ex-plugs & receptacles accd. to IEC 60309-1/2 16A (wall socket and plug)

Marking accd. to 2014/34/EU	⊕ II 2 G / Ex db eb IIC / IIB T6 / T5 Gb ⊕ II 2 D Ex tb IIIC / IIIB db
Ec-Type Examination Certificate	pending
IECEX Certificate of Conformity	pending
Marking accd. to IECEx	Ex db eb IIC / IIB T6 / T5 Gb
Permissible ambient temperature	-55 °C up to +55 °C
Rated voltage	up to 400 V, (3-pole) / 690 V, (4-pole) / 500 V, (5-pole) AC
Rated current	16 A
Frequency	up to 400 Hz
Rated making/rated breaking capacity AC3 accd. EN 60947-3	U <sub>e</sub> 250 V / I <sub>e</sub> 16 A (3-pole) U <sub>e</sub> 690 V / I <sub>e</sub> 16 A (4-pole) U <sub>e</sub> 500 V / I <sub>e</sub> 16 A (5-pole)
External fuse, max.	without thermal protection 16 A with thermal protection 35 A gG (rated current 16 A set to)
Protection class accd. to EN 60598	I
Degree of protection accd. to EN 60529	IP66

#### Wall socket

Cable gland	1 x M25 cable gland, 1 x M25 Ex-screw plug plastic or 2 x metal thread M20 with Ex-screw plug plastic
Terminals	2 x 1 - 4 mm <sup>2</sup>
Enclosure material	Glass fibre reinforced polyester


#### Plug

Cable gland	Ø 8 - 19 mm (3-pole) / Ø 8 - 21 mm (4-pole) / 12 - 21 mm (5-pole)
Terminals	1 x 1.0 - 2.5 mm <sup>2</sup>
Enclosure material	Polyamide


### Ordering details

Voltage	h	Type	Aux. contact	Cable entry	Weight ca.	Low temp. -55 °C up to +40 °C	High temp. -25 °C up to +55 °C	Order No.
---------	---	------	--------------	-------------	------------	----------------------------------	-----------------------------------	-----------

#### Type 16 A 3-pole

110-130 V		Wall socket	–	M25 KU	1.2 kg		X	<b>GHG 511 4304 R0001</b>
		Wall socket	–	M20 GE	1.2 kg		X	<b>GHG 511 4304 R0002</b>
		Wall socket	–	M20 GE	1.2 kg		X	<b>GHG 511 4304 R0102</b>
		Wall socket	–	M20 ME	1.3 kg		X	<b>GHG 511 4304 R3001</b>
		Wall socket	–	M20 ME	1.3 kg		X	<b>GHG 511 4304 R3101</b>
		Wall socket	–	M20 GM	1.3 kg		X	<b>GHG 511 4304 R3003</b>
		Wall socket	–	M20 GM	1.3 kg		X	<b>GHG 511 4304 R3103</b>
		Plug				0.35 kg	X	X

#### Type 16 A 3-pole

200-250 V		Wall socket	–	M25 KU	1.2 kg		X	<b>GHG 511 4306 R0001</b>
		Wall socket	–	M20 GE	1.2 kg		X	<b>GHG 511 4306 R0002</b>
		Wall socket	–	M20 GE	1.2 kg		X	<b>GHG 511 4306 R0102</b>
		Wall socket	–	M20 ME	1.3 kg		X	<b>GHG 511 4306 R3001</b>
		Wall socket	–	M20 ME	1.3 kg		X	<b>GHG 511 4306 R3101</b>
		Wall socket	–	M20 GM	1.3 kg		X	<b>GHG 511 4306 R3003</b>
		Wall socket	–	M20 GM	1.3 kg		X	<b>GHG 511 4306 R3103</b>
		Plug				0.35 kg	X	X



plug



Wall socket

Ordering details

Voltage	h	Type	Aux. contact	Cable entry	Weight ca.	Low temp. -55 °C up to +40 °C	High temp. -25 °C up to +55 °C	Order No.	
<b>Type 16 A 4-pole</b>									
200-250 V		Wall socket	–	KU	1.2 kg		X	<b>GHG 511 4409 R0001</b>	
		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4409 R3001</b>	
		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4409 R3101</b>	
		Wall socket	–	GM	1.3 kg			X	<b>GHG 511 4409 R3003</b>
		Wall socket	–	GM	1.3 kg		X		<b>GHG 511 4409 R3103</b>
		Plug				0.35 kg	X	X	<b>GHG 511 7409 R0001</b>
380-415 V		Wall socket	–	KU	1.2 kg		X	<b>GHG 511 4406 R0001</b>	
		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4406 R3001</b>	
		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4406 R3101</b>	
		Wall socket	–	GM	1.3 kg			X	<b>GHG 511 4406 R3003</b>
		Wall socket	–	GM	1.3 kg		X		<b>GHG 511 4406 R3103</b>
		plug				0.35 kg	X	X	<b>GHG 511 7406 R0001</b>
480-500 V		Wall socket	–	KU	1.2 kg		X	<b>GHG 511 4407 R0001</b>	
		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4407 R3001</b>	
		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4407 R3103</b>	
		Plug				0.35 kg	X	X	<b>GHG 511 7407 R0001</b>
600-690 V		Wall socket	–	KU	1.4 kg		X	<b>GHG 511 4405 R0001</b>	
		Wall socket	–	ME	1.5 kg		X	<b>GHG 511 4405 R3001</b>	
		Wall socket	–	ME	1.5 kg		X	<b>GHG 511 4405 R3101</b>	
		Plug				0.35 kg	X	X	<b>GHG 511 7405 R0001</b>
<b>Type 16 A 5-pole</b>									
200-250 V		Wall socket	–	KU	1.2 kg		X	<b>GHG 511 4506 R0001</b>	
380-415 V		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4506 R3001</b>	
		Wall socket	–	ME	1.3 kg		X	<b>GHG 511 4506 R3101</b>	
		Wall socket	–	GM	1.3 kg			X	<b>GHG 511 4506 R3003</b>
		Wall socket	–	GM	1.3 kg		X		<b>GHG 511 4506 R3103</b>
		Plug				0.35 kg	X	X	<b>GHG 511 7506 R0001</b>

Other voltage ranges and versions available on request,  
 KU = 1 x plastic-cable gland M25, 1 x M25 Ex-screw plug plastic  
 ME = 2 x metal thread M20  
 GE = 2 x plastic thread M20 without cable gland/screw plug  
 GM = 2 x metal thread M20 with screw plug, with external earth bolt M6

**Ex-plugs & receptacles 16A 3/4/5-pole up to 690 V**

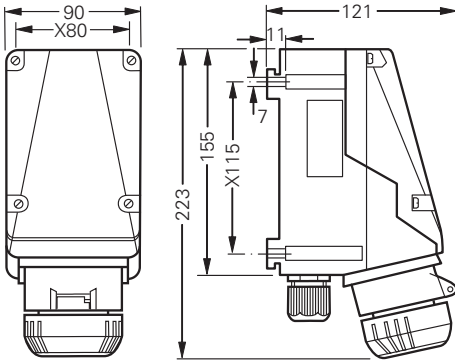


Wall socket

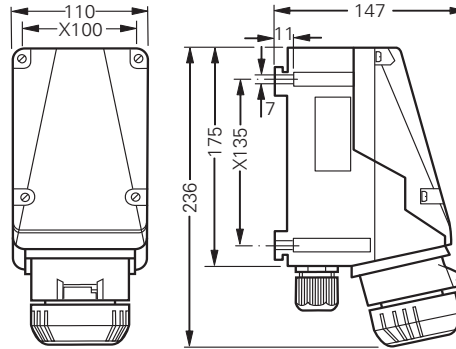


Plug

**Dimension drawing | Wiring diagram**

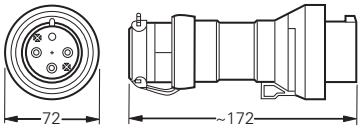


Wall socket 3-pole

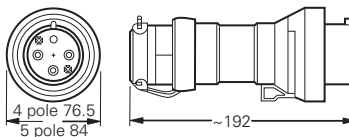


Wall socket 4/5-pole

X = fixing dimensions



Plug 3-pole



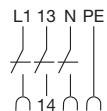
Plug 4/5-pole

without  
Aux. contact



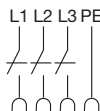
1 P + N + PE

with  
aux. contact



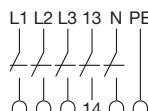
1P + AUX + N + PE

without  
aux. contact



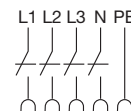
3P + PE

with  
aux. contact



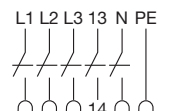
3P + AUX + PE

without  
aux. contact



3P + N + PE

with  
aux. contact



3P + N + AUX + PE



Dimensions in mm



Wall socket



Plug

### Technical data

#### Ex-plugs & receptacles accd. to IEC 60309-1/2 63 A (wall socket and plug)

Marking accd. to 2014/34/EU	⊕ II 2 G / Ex db eb IIC / IIB T6 / T5 Gb ⊕ II 2 D Ex tb IIIC / IIIB db
Ec-Typee Examination Certificate	Pending
IECEX Certificate of Conformity	Pending
Marking accd. to IECEx	Ex db eb IIC / IIB T6 / T5 Gb
Permissible ambient temperature	-55 °C up to +55 °C
Rated voltage	Up to 400 V, (3-pole) / 690 V, (4-pole) / 500 V, (5-pole) AC
Rated current	63 A
Frequency	Up to 400 Hz
Rated making / rated breaking capacity AC-3 accd. EN 60947-3	$U_e$ 690 V / $I_e$ 63 A
External back up fuse	Without thermal protection 63 A with thermal protection 80 A gG (rated current 63 A set to)
Protection class accd. to EN 60598	I
Degree of protection accd. to EN 60529	IP66
Enclosure colour	Black

#### Wall socket

Cable entry / enclosure drilling	1 x M50 cable gland, 1 x M50 Ex-screw plug plastic or 2 x M40 metal thread with 2 Ex-screw plug plastic
Terminals	2 x 4 - 25 mm <sup>2</sup> / with ring cable lug <sup>2)</sup> 1 x 35 mm <sup>2</sup>
Enclosure material	Glass fibre reinforced polyester

#### Plug

cable gland	Ø 19 - 34 mm
Terminals	1 x 4 - 16 mm <sup>2</sup> , cable lug <sup>3)</sup> 1 x 25 mm <sup>2</sup>
Enclosure material	Polyamide

<sup>2)</sup> use supplied cable lugs

<sup>3)</sup> see accessories

## Ex-plugs & receptacles 63 A 4- and 5-pole up to 690 V



Plug cap



Plug



Wall socket

### Ordering details

Voltage	h	Type	Aux. contact	Cable entry	Weight ca.	Low temp. -55 °C up to +40 °C	High temp. -25 °C up to +55 °C	Order No.	
<b>Type 63 A 4-pole</b>									
200-250 V		Wall socket	–	KU	8.1 kg		X	<b>GHG 514 4409 R0001</b>	
		Wall socket	–	ME	8.2 kg		X	<b>GHG 514 4409 R3001</b>	
		Wall socket	–	ME	8.2 kg		X	<b>GHG 514 4409 R3101</b>	
		9 h	Plug			0.9 kg	X	X	<b>GHG 514 7409 R0001</b>
		380-415 V		Wall socket	–	KU	8.1 kg		X
Wall socket	–			ME	8.2 kg		X	<b>GHG 514 4406 R3001</b>	
Wall socket	–			ME	8.2 kg		X	<b>GHG 514 4406 R3101</b>	
Wall socket	–			GM	8.2 kg		X	<b>GHG 514 4406 R3003</b>	
Wall socket	–			GM	8.2 kg		X	<b>GHG 514 4406 R3103</b>	
6 h	Plug					0.9 kg	X	X	<b>GHG 514 7406 R0001</b>
480-500 V		Wall socket	–	KU	8.1 kg		X	<b>GHG 514 4407 R0001</b>	
		Wall socket	–	ME	8.2 kg		X	<b>GHG 514 4407 R3001</b>	
		Wall socket	–	ME	8.2 kg		X	<b>GHG 514 4407 R3101</b>	
		Wall socket	–	GM	8.2 kg		X	<b>GHG 514 4407 R3003</b>	
		Wall socket	–	GM	8.2 kg		X	<b>GHG 514 4407 R3103</b>	
		7 h	Plug			0.9 kg	X	X	<b>GHG 514 7407 R0001</b>
600-690 V		Wall socket	–	KU	8.1 kg		X	<b>GHG 514 4405 R0001</b>	
		Wall socket	–	ME	8.2 kg		X	<b>GHG 514 4405 R3002</b>	
		Wall socket	–	ME	8.2 kg		X	<b>GHG 514 4405 R3102</b>	
		5 h	Plug			0.9 kg	X	X	<b>GHG 514 7405 R0001</b>
		<b>Type 63 A 5-pole</b>							
200-250 V		Wall socket	–	KU	8.1 kg		X	<b>GHG 514 4506 R0001</b>	
380-415 V		Wall socket	–	ME	8.2 kg		X	<b>GHG 514 4506 R3001</b>	
		Wall socket	ja	ME	8.2 kg		X	<b>GHG 514 4506 R3101</b>	
6 h		Wall socket	–	GM	8.2 kg		X	<b>GHG 514 4506 R3018</b>	
		Wall socket	–	GM	8.2 kg		X	<b>GHG 514 4506 R3118</b>	
		Plug			0.9 kg		X	X	<b>GHG 514 7506 R0001</b>

Other voltage ranges and versions available on request,  
 KU = 1 x plastic-cable gland M25, 1 x M25 Ex-screw plug plastic  
 ME = 2 x metal thread M20  
 GE = 2 x plastic thread M20 without cable gland/screw plug  
 GM = 2 x metal thread M20 with screw plug, with external earth bolt M6



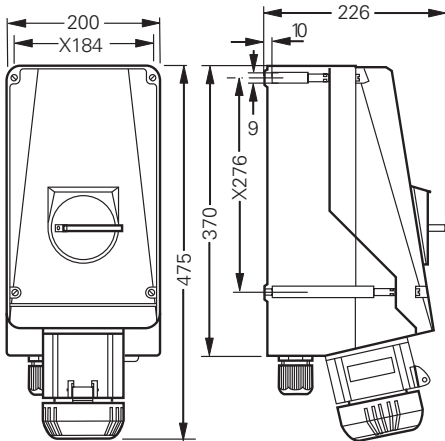


Wall socket



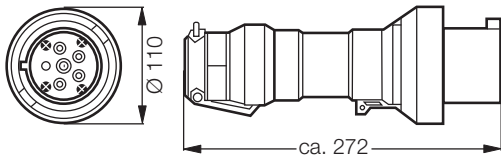
Plug

Dimension drawing | Wiring diagram

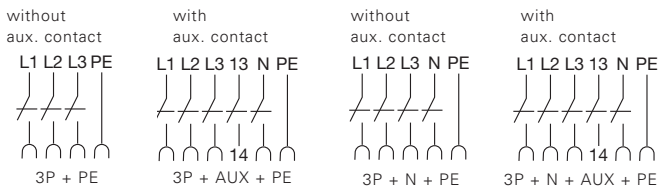


wall socket 4/5-pole

X = fixing dimensions



plug 4/5-pole





Eaton's Crouse-Hinds Business

# The safety you rely on.

See the complete offering of Hazardous and Industrial Products at [www.crouse-hinds.de](http://www.crouse-hinds.de).

**U.S. (Global Headquarters):  
Eaton's Crouse-Hinds  
Business**

1201 Wolf Street  
Syracuse, NY 13208

(866) 764-5454  
FAX: (315) 477-5179  
FAX Orders Only:  
(866) 653-0640

[CrouseCustomerCTR@Eaton.com](mailto:CrouseCustomerCTR@Eaton.com)

**For more information:**

If further assistance is required, please contact an authorized Eaton Distributor, Sales Office, or Customer Service Department.

**Australia**

Phone +61-2-8787-2777  
Fax +61-2-9609-2342  
[crousehindsanz@eaton.com](mailto:crousehindsanz@eaton.com)

**China**

Phone +86-21-2899-3600  
Fax +86-21-2899-4055  
[ECHsales@eaton.com](mailto:ECHsales@eaton.com)

**Great Britain**

Phone +44-247-630-89 30  
Fax +44-247-630-10 27  
[sales5@eaton.com](mailto:sales5@eaton.com)

**India**

Phone +91-124-4683888  
Fax +91-124-4683899  
[cchindia@eaton.com](mailto:cchindia@eaton.com)

**Canada**

Toll Free +1-800-265-0502  
Fax +1-800-263-9504  
Fax orders only:  
+1-866-653-0645

**Korea**

Phone +82-2-3484-6783  
Fax +82-2-3484-6778  
CCHK-sales@  
[cooperindustries.com](mailto:cooperindustries.com)

**Mexico/Latin America/  
Caribbean**

Phone +52-555-804-4000  
Fax +52-555-804-4020  
[mxmercadotecnia@cooperindustries.com](mailto:mxmercadotecnia@cooperindustries.com)

**Spain**

Phone +34-9-37362710  
Fax +34-9-37835055  
[sales.CCH.es@cooperindustries.com](mailto:sales.CCH.es@cooperindustries.com)

**Middle East (Dubai)**

Phone +971-4-427-2522 / 2500  
Fax +971-4-429-8521  
[CHMEsales@Eaton.com](mailto:CHMEsales@Eaton.com)

**The Netherlands**

Phone +31-10-2452145  
Fax +31-10-2452121  
[CHRD\\_mail@Eaton.com](mailto:CHRD_mail@Eaton.com)

**Norway**

Phone +47-32-244600  
Fax +47-32-244646  
[CHLloffice@eaton.com](mailto:CHLloffice@eaton.com)

**Singapore:**

Phone +65-6645-9888  
Fax +65-6297-4819  
[CHSI-Sales@Eaton.com](mailto:CHSI-Sales@Eaton.com)

**Turkey**

Phone +90-216-464-20-20  
Fax +90-216-464-20-10  
[infoEGTurkey@eaton.com](mailto:infoEGTurkey@eaton.com)

**Russia**

Phone +7-495 510-24-27  
Fax +7-495 510-24-28  
[info@cooper.ru.com](mailto:info@cooper.ru.com)  
[www.cooper-russia.ru](http://www.cooper-russia.ru)

**Eaton's Crouse-Hinds Business**

Neuer Weg – Nord 49  
D-69412 Eberbach

Phone +49 (0) 6271/806-500  
Fax +49 (0) 6271/806-476  
E-mail [info-ex@eaton.com](mailto:info-ex@eaton.com)  
Internet [www.crouse-hinds.de](http://www.crouse-hinds.de)

**Eaton**

1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
[Eaton.com](http://Eaton.com)

© 2016 Eaton Corporation  
All Rights Reserved  
Printed in Germany  
Publication No. BR 300 8000  
September 2016

Changes to the products, to the information contained in this document, and to prices are reserved; so are errors and omissions. Only order confirmations and technical documentation by Eaton is binding. Photos and pictures also do not warrant a specific layout or functionality. Their use in whatever form is subject to prior approval by Eaton. The same applies to Trademarks (especially Eaton, Moeller, and Cutler-Hammer). The Terms and Conditions of Eaton apply, as referenced on Eaton Internet pages and Eaton order confirmations.

**Eaton's Crouse-Hinds Business**

1201 Wolf Street  
Syracuse, NY 13208  
(866) 764-5454  
[CrouseCustomerCTR@Eaton.com](mailto:CrouseCustomerCTR@Eaton.com)

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



Powering Business Worldwide