

## CDA-CDC series

### The compact inserts

#### CDA inserts with screw-type termination

The screw-type connector inserts CDA series with 10 and 16 poles + ⊕ are now made using screw-type terminals (CNE series) with a built-in wire protection pressure plate of proven reliability and practicality.

The wire protection pressure plate preserves the conductors in case of wiring with **unprepared conductors** (i.e. without wire end ferrules) up to a maximum wire cross-section of **4 mm<sup>2</sup>** (12 AWG).

The variant without a wire protection pressure plate (code with suffix X) is also available, for use with **prepared conductors** featuring a wire end ferrule with a maximum usable wire cross-section of **2,5 mm<sup>2</sup>** (14 AWG).



#### CDC inserts with crimp termination

The crimp termination CDC series of inserts with 10 and 16 poles + ⊕ now adopt the tried and tested contact retention technique of connector series CCE and CQE for removable crimp contacts (series CC, max 16A).



#### CDA-CDC INSERTS SUM-UP

- ☑ According to standard EN 61984:  
16A 250V 4kV 3  
16A 230/400V 4kV 2
- ☑ Insulation resistance: ≥ 10 GΩ
- ☑ Ambient temperature limit: -40 °C ... +125 °C
- ☑ Construction material: UL 94 V-0 self-extinguishing thermoplastic resin
- ☑ Mechanical life: ≥ 500 cycles
- ☑ Built-in silver plated contacts (only CDA series)

#### The applications

Like those of the previous series, CDA and CDC inserts and their enclosures are used in accordance with the recommendations EUROMAP 12, EUROMAP 13, EUROMAP 14-1, EUROMAP 16 and EUROMAP 62 (European industry consortium for moulding machines and plastic processing).

The CDC inserts can also be used with CC series crimp contacts made of iron/constantan (Fe-CuNi) for the cabling of J type thermocouples in accordance with IEC/EN 60584-1 (EUROMAP 14-1 recommendation).

The CDA/CDC series inserts can also be coupled with previous insert versions.



# CSAH-SQUICH® series

## Connection without tools, slim version

### CSAH-SQUICH® inserts

To improve high performance industrial connections, ILME has developed and evolved its own spring clamp connectors to meet the market needs and make installation simpler.

### The SQUICH® inserts are adaptable to any type of solid or flexible conductor, including unprepared conductors

Each of the spring terminals has an actuator button, suitably shaped and incorporated in the cavity. When this button is pressed, it triggers the closure of the spring device of the corresponding terminal, safely and reliably connecting the conductor to its respective electric contact in the connector.

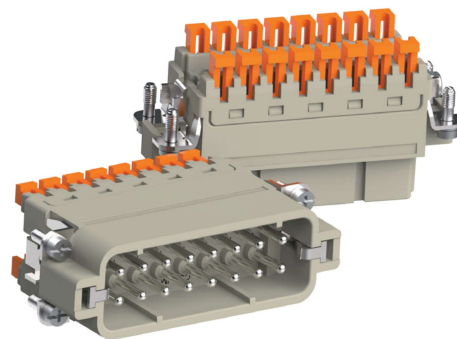
The actuator buttons are supplied raised, in the "open terminal" position and are easily distinguishable by the **orange colour which makes them stand out from the insulating body of the connector.**

The advantage of such an **exclusive solution** is that the **actuators disappear completely within the body of the connector**, making it easy to identify terminals not yet closed and eliminating possible obstacles to the movement of the conductors during installation and maintenance. In this manner during the cabling phase the **need for a tool to activate the terminal is completely eliminated and a simple operation is all you need to make the connection.**

### Shaped button for measuring instruments

The profile of the button used in the **SQUICH®** series inserts **allow a measuring probe to be inserted.**

This allows checks to be carried out to ensure that the wiring is correct.



CSAH-SQUICH®

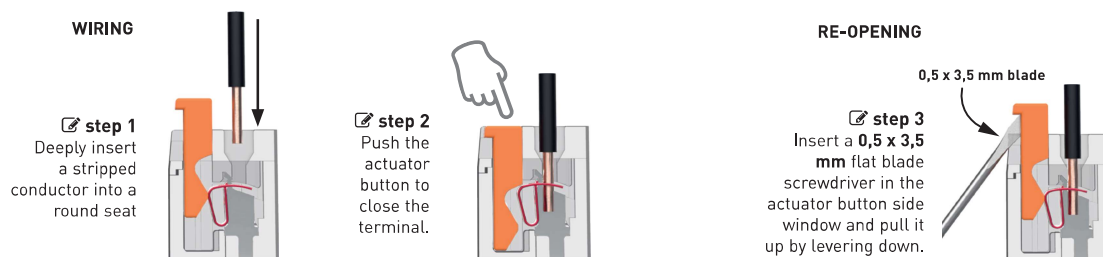
### CSAH-SQUICH® INSERTS SUM-UP

- ✔ **Reduced space**
- ✔ **Reduced wiring time**
- ✔ **No need for tools**
- ✔ **Quick identification of wired and non-wired terminals**
- ✔ **Terminals already open and ready for conductor clamping**
- ✔ **Built-in silver plated contacts**
- ✔ **Excellent fastening solution**
- ✔ **Great resistance to strong vibration**

### Simple terminal reopening

To reopen the terminals, simply introduce the tip of a common 0,5 x 3,5 mm flat blade screwdriver in the shaped pocket on the head of the actuator, and slightly rotate the screwdriver downwards: this will lift the actuator into its open terminal position.

### ✔ SQUICH® Connection technology



# CDA 10 poles + ⊕ 16A - 250V

enclosures:  
size "49.16"

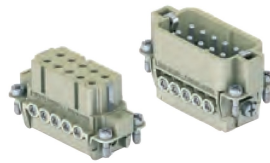
page:

IL-BRID	374 - 377, 382
CZ7 IP67, single lever	384
W-TYPE for aggressive environments	519
E-Xtreme® corrosion proof	540
EMC	576

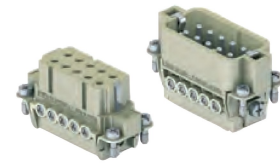
panel supports:  
COB + adaptor

page:  
652 - 654

inserts,  
screw terminal connection



inserts,  
screw terminal connection



CDA

description	part No.	part No.
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indirect, with pressure plate <sup>1)</sup>  
female inserts with female contacts  
male inserts with male contacts

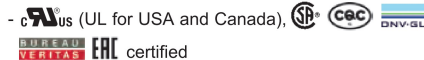
**CDAF 10**  
**CDAM 10**

direct, without pressure plate <sup>2)</sup>  
female inserts with female contacts  
male inserts with male contacts

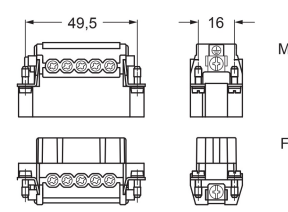
**CDAF 10 X**  
**CDAM 10 X**

- characteristics according to EN 61984:

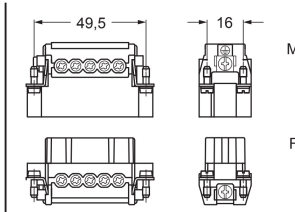
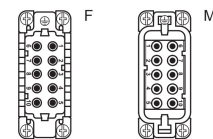
**16A 250V 4kV 3**  
**16A 230/400V 4kV 2**



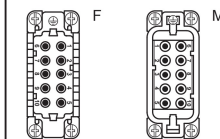
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 1 mΩ
- according to recommendations EUROMAP N° 16
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)



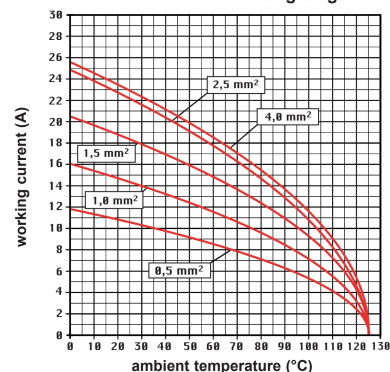
contacts side (front view)



- inserts with pressure plate for conductors cross-sections:  
0,5 - 4 mm<sup>2</sup> - AWG 20 - 12
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

- inserts without pressure plate for prepared conductors with cross-sections:  
0,25 - 2,5 mm<sup>2</sup> - AWG 24 - 14
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

**CDA 10 poles connector inserts**  
**Maximum current load derating diagram**



<sup>1)</sup> for unprepared conductors



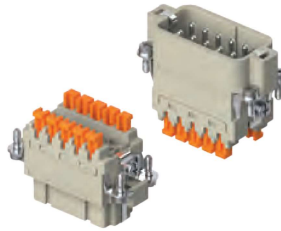
<sup>2)</sup> for conductors with end sleeve ferrule



# CSAH-SQUICH® 10 poles + ⊕ 16A - 250V

enclosures: size "49.16"	page:
IL-BRID	374 - 377, 382
CZ7 IP67, single lever	384
W-TYPE for aggressive environments	519
E-Xtreme® corrosion proof	540
EMC	576
panel supports: COB + adaptor	page: 652 - 654

inserts,  
spring terminal connections without tools



description	part No.
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spring terminals with actuator button  
female inserts with female contacts  
male inserts with male contacts

CSAHF 10  
CSAHM 10

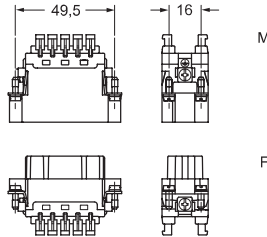
- characteristics according to EN 61984:

**16A 250V 4kV 3**  
**16A 400V 4kV 2**

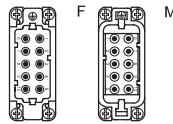
- cULus (UL for USA and Canada), DNV-GL, VERITAS

ERC certified

- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram below; for more information see page 28

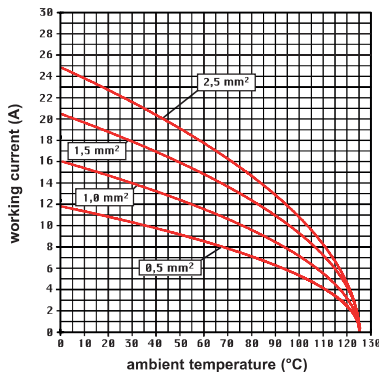


contacts side (front view)



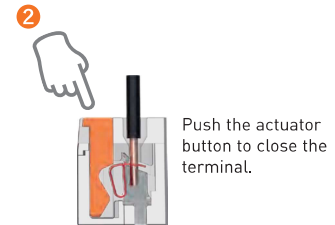
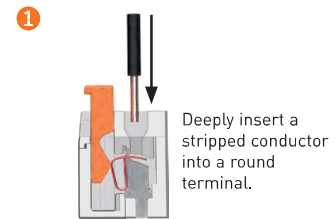
- inserts for conductors with the following sections: 0,14 - 2,5 mm<sup>2</sup> - AWG 26 - 14
- for wires with crimped ferrule, usable section: up to 1,5 mm<sup>2</sup> (AWG 16)
- conductors stripping length: 9...11 mm

CSAH 10 poles connector inserts  
Maximum current load derating diagram

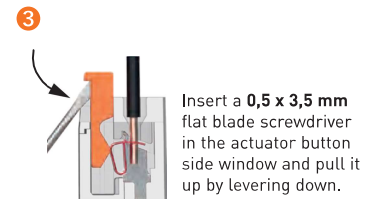


### SQUICH®-spring connection technology

#### WIRING



#### RE-OPENING



# CDA 16 poles + ⊕ 16A - 250V

enclosures:  
size "66.16"

page:

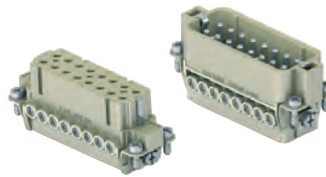
IL-BRID  
CZ7 IP67, single lever  
W-TYPE for aggressive environments  
E-Xtreme® corrosion proof  
EMC

378 - 382  
385  
520  
541  
577

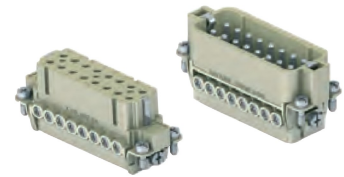
panel supports:  
COB + adaptor

page:  
652 - 654

inserts,  
screw terminal connection



inserts,  
screw terminal connection



description

part No.

part No.

indirect, with pressure plate <sup>1)</sup>  
female inserts with female contacts  
male inserts with male contacts

**CDAF 16**  
**CDAM 16**

direct, without pressure plate <sup>2)</sup>  
female inserts with female contacts  
male inserts with male contacts

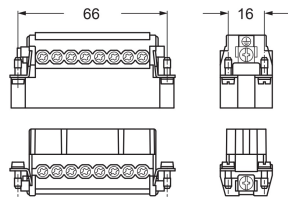
**CDAF 16 X**  
**CDAM 16 X**

- characteristics according to EN 61984:

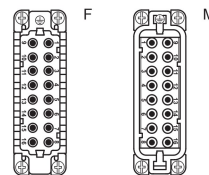
**16A 250V 4kV 3**  
**16A 230/400V 4kV 2**

- certified

- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 1 \text{ m}\Omega$
- according to recommendations EUROMAP N° 13 / N° 14.1
- for max. current load see the connector inserts derating diagram below; for more information see page 28

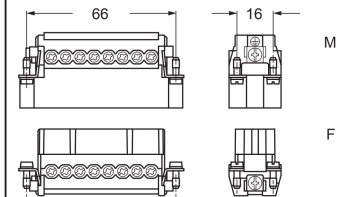


contacts side (front view)

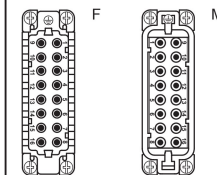


- inserts with pressure plate for conductors cross-sections:  
0,5 - 4 mm<sup>2</sup> - AWG 20 - 12
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

<sup>1)</sup> for unprepared conductors



contacts side (front view)

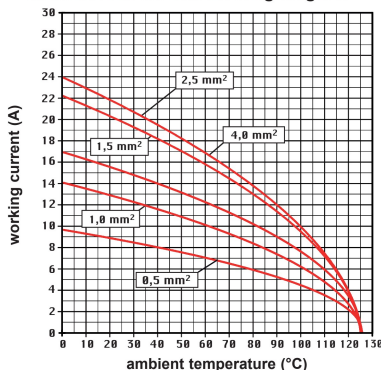


- inserts without pressure plate for prepared conductors with cross-sections:  
0,25 - 2,5 mm<sup>2</sup> - AWG 24 - 14
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

<sup>2)</sup> for conductors with end sleeve ferrule



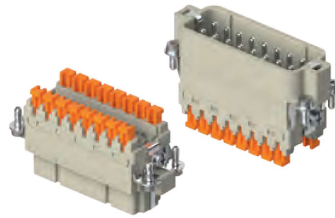
**CDA 16 poles connector inserts**  
**Maximum current load derating diagram**



# CSAH-SQUICH® 16 poles + ⊕ 16A - 250V

enclosures: size "66.16"	page:
IL-BRID	378 - 382
CZ7 IP67, single lever	385
W-TYPE for aggressive environments	520
E-Xtreme® corrosion proof	541
EMC	577
panel supports: COB + adaptor	page: 652 - 654

## inserts, spring terminal connections without tools

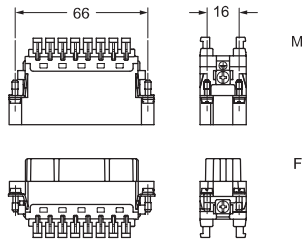


description	part No.
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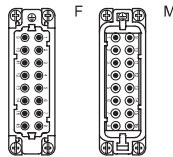
spring terminals with actuator button  
female inserts with female contacts  
male inserts with male contacts

**CSAHF 16**  
**CSAHM 16**

- characteristics according to EN 61984:  
**16A 250V 4kV 3**  
**16A 400V 4kV 2**
- certified by UL (UL for USA and Canada), DNV-GL, BUREAU VERITAS, ENEC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram below; for more information see page 28

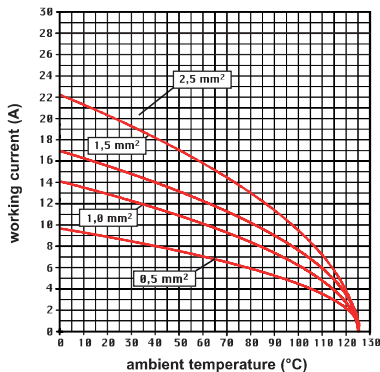


contacts side (front view)



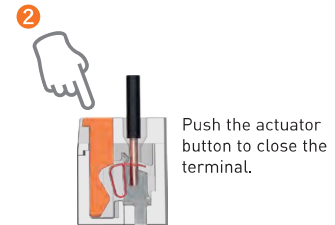
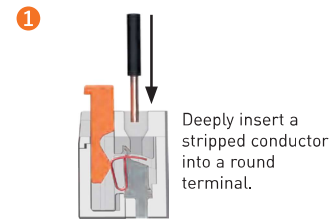
- inserts for conductors with the following sections:  
0,14 - 2,5 mm<sup>2</sup> - AWG 26 - 14
- for wires with crimped ferrule, usable section:  
up to 1,5 mm<sup>2</sup> (AWG 16)
- conductors stripping length: 9...11 mm

**CSAH 16 poles connector inserts**  
**Maximum current load derating diagram**

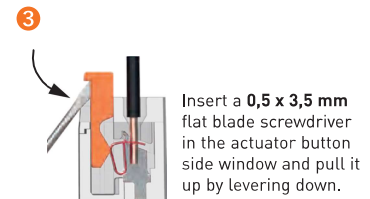


## SQUICH®-spring connection technology

### WIRING



### RE-OPENING



# CDA 32 poles + ⊕ 16A - 250V

enclosures:  
size "66.40"

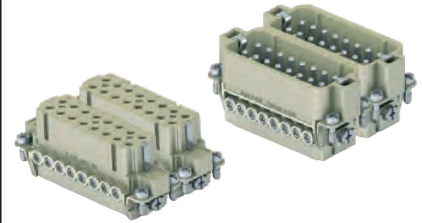
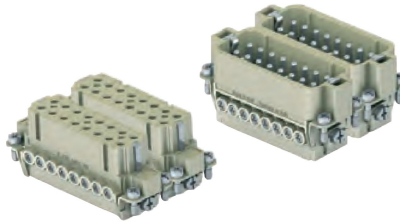
page:

C-TYPE IP65 or IP66/IP69  
W-TYPE for aggressive environments  
E-Xtreme® corrosion proof

431 - 434  
527  
548

inserts,  
screw terminal connection

inserts,  
screw terminal connection



description

part No.

part No.

part No.

part No.

indirect, with pressure plate <sup>1)</sup>  
female inserts, No. (1-16) and (17-32)  
male inserts, No. (1-16) and (17-32)

**CDAF 16**  
**CDAM 16**

**CDAF 16 N**  
**CDAM 16 N**

direct, without pressure plate <sup>2)</sup>  
female inserts, No. (1-16) and (17-32)  
male inserts, No. (1-16) and (17-32)

**CDAF 16 X**  
**CDAM 16 X**

**CDAF 16 XN**  
**CDAM 16 XN**

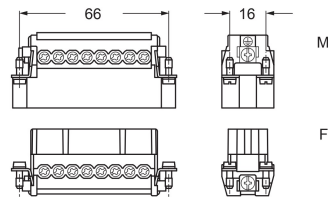
- characteristics according to EN 61984:

**16A 250V 4kV 3**  
**16A 230/400V 4kV 2**

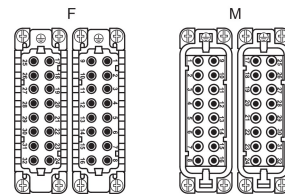
- cULus (UL for USA and Canada),

- certified

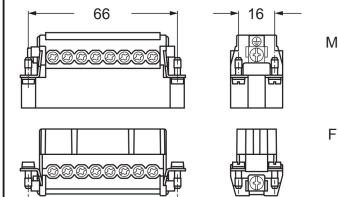
- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 1 \text{ m}\Omega$
- according to recommendations EUROMAP N° 12 / N° 62
- for max. current load see the connector inserts derating diagram below; for more information see page 28



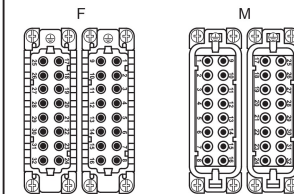
contacts side (front view)



- inserts with pressure plate for conductors cross-sections:  
0,5 - 4 mm<sup>2</sup> - AWG 20 - 12
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

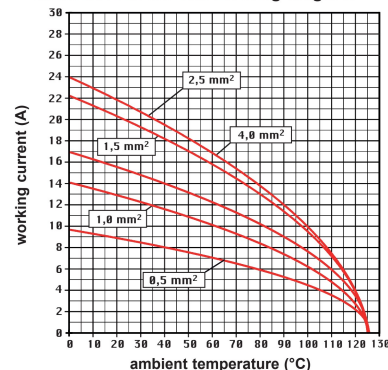


contacts side (front view)



- inserts without pressure plate for prepared conductors with cross-sections:  
0,25 - 2,5 mm<sup>2</sup> - AWG 24 - 14
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

**CDA 32 poles connector inserts**  
**Maximum current load derating diagram**



<sup>1)</sup> for unprepared conductors



<sup>2)</sup> for conductors with end sleeve ferrule



# CSAH-SQUICH® 32 poles + ⊕ 16A - 250V

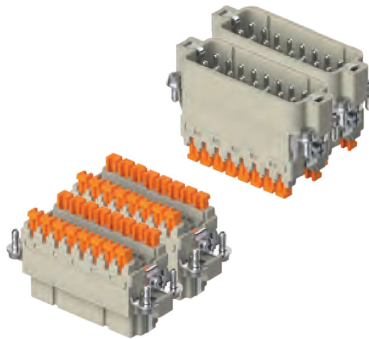
enclosures:  
size "66.40"

page:

C-TYPE IP65 or IP66/IP69  
W-TYPE for aggressive environments  
E-Xtreme® corrosion proof

431 - 434  
527  
548

inserts,  
spring terminal connections without tools



description

part No.

part No.

spring terminals with actuator button  
female inserts, No. (1-16) and (17-32)  
male inserts, No. (1-16) and (17-32)

CSAHF 16  
CSAHM 16

CSAHF 16 N  
CSAHM 16 N

- characteristics according to EN 61984:

**16A 250V 4kV 3**

**16A 400V 4kV 2**

- certified by UL (UL for USA and Canada),



ERAC certified

- rated voltage according to UL/CSA: 600V

- insulation resistance:  $\geq 10 \text{ G}\Omega$

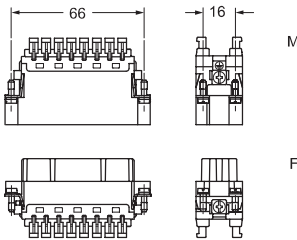
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$

- made of self-extinguishing thermoplastic resin UL 94V-0

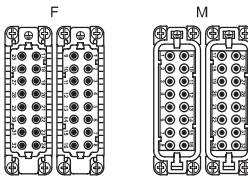
- mechanical life:  $\geq 500$  cycles

- contact resistance:  $\leq 3 \text{ m}\Omega$

- for max. current load see the connector inserts derating diagram below; for more information see page 28

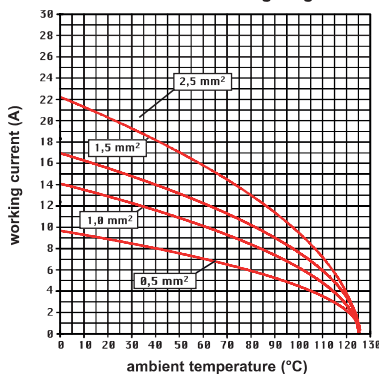


contacts side (front view)



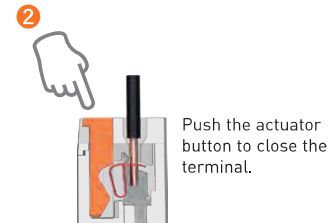
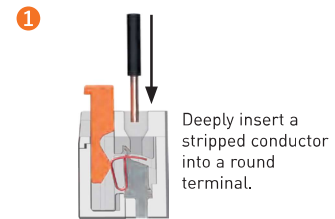
- inserts for conductors with the following sections:  
0,14 - 2,5 mm<sup>2</sup> - AWG 26 - 14
- for wires with crimped ferrule, usable section:  
up to 1,5 mm<sup>2</sup> (AWG 16)
- conductors stripping length: 9...11 mm

CSAH 32 poles connector inserts  
Maximum current load derating diagram



## SQUICH®-spring connection technology

### WIRING



### RE-OPENING

