

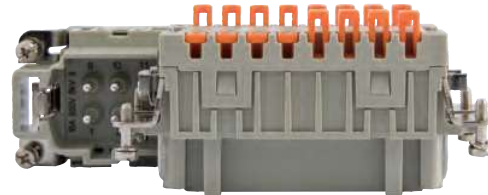
CSH-SQUICH® series

CSH-SQUICH®

CSH-SQUICH® series

Spring connection with actuator button

In this view the wires are connected to the insert contacts by means of a spring terminal with actuator button.



CSH-SQUICH® INSERTS SUM-UP

- ☑ No special wire preparation (other than stripping)
- ☑ No wiring tool is necessary
- ☑ It offers an excellent fastening solution and a great resistance to strong vibrations;
- ☑ It allows solid and flexible wires with sections between 0,14 and 2,5 mm² (26-14 AWG) to be used (both with non-prepared conductors and those prepared with ferrule)
- ☑ It greatly reduces insert preparation and cabling times
- ☑ Built-in silver plated contacts

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.

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.



“Just push”
discover all the advantages
of the SQUICH® technology

CNE and CSH-SQUICH® series

TECHNICAL FEATURES

CNE CSH-SQUICH®

| Insert series | | CNE (with pressure plate) CNE...X (w/o pressure plate) CNE...RY (for high temperature) | CSH-SQUICH® |
|--------------------------------------|---|--|--|
| No. of poles ¹⁾ | Main contacts + ⊕ | 6, 10, 16, 24, (32 = 2x16) (48 = 2x24) | |
| | auxiliary contacts | — | |
| Rated current ²⁾ | | 16A | |
| EN IEC 61984 Pollution degree 3 | rated voltage | 500V | |
| | rated impulse voltage | 6kV | |
| | pollution degree | 3 | |
| EN IEC 61984 Pollution degree 2 | rated voltage | 400/690V | |
| | rated impulse voltage | 6kV | |
| | pollution degree | 2 | |
| UL / CSA certification | rated voltage (a.c./d.c.) | 600V | |
| Contact resistance | | ≤ 1 mΩ | ≤ 3 mΩ |
| Insulation resistance | | ≥ 10 GΩ | |
| Ambient temperature limit (°C) | min | -40 °C | -40 °C |
| | max | +125 °C / +180 °C (CNE...RY) | +125 °C |
| Degree of protection | with enclosures (according to type) | IP65, IP66/IP69, IP66/IP67/IP69, IP66/IP68/IP69 | |
| | without enclosures (in mated condition) | IP20 (IPXXB) | |
| | - termination side on male and female inserts - mating side on female inserts | | |
| Conductor connections | | screw type | spring and clamp with actuator button |
| Conductor cross-sectional area | mm ² | 0,5 - 4 (CNE) | 0,14 - 2,5 |
| | | 0,25 - 2,5 (CNE...X) | |
| | AWG | 20 - 12 (CNE) | 26 - 14 |
| | | 24 - 14 (CNE...X) | |
| Mechanical endurance (mating cycles) | | ≥ 500 | |

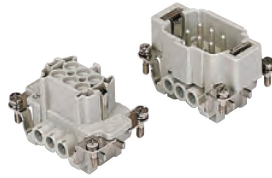
1) Polarities shown in brackets may be obtained by using two inserts in their own double-sized housings

2) Please check the inserts derating diagrams to establish the actual maximum operating current according to the ambient temperature, the conductor cross-sectional area, the polarity of the connector, and any external constraint may derive e.g. by the continuous operating temperature sustained by the chosen conductor sheathing or by end-product safety standards fixing max allowed temperature rise on terminals (e.g. 30 K, 45 K or 50 K)

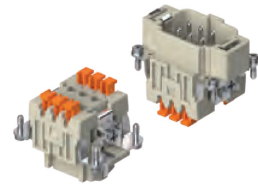
CNE CSH-SQUICH® 6 poles + ⊕ 16A - 500V

| | |
|--|---------------------------|
| enclosures: size "44.27" | page: |
| C-TYPE IP65 or IP66/IP69 | 387 - 392 |
| C7 IP67, single lever | 436 - 437 |
| V-TYPE IP65 or IP66/IP69, single lever | 444 - 447 |
| BIG hoods | 466 - 467 |
| T-TYPE IP65 insulating | 480 - 481 |
| T-TYPE / W IP66/IP69 insulating | 489 |
| HYGIENIC T-TYPE / H IP66/IP69 | 501 |
| HYGIENIC T-TYPE / C IP66/IP69, -50 °C | 506 |
| W-TYPE for aggressive environments | 521 |
| E-Xtreme® corrosion proof | 530 - 531, 542, 550 - 551 |
| EMC | 578 |
| Central lever | 603 - 605 |
| LS-TYPE | 618 - 619 |
| IP68 | 632 - 635 |
| panel supports: | page: |
| COB | 652 - 653 |

inserts,
screw terminal connections



inserts,
spring terminal connections without tools

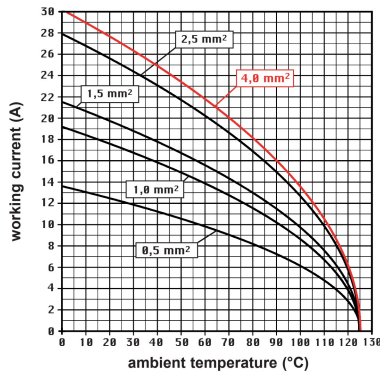


CNE CSH-SQUICH®

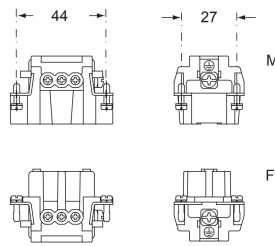
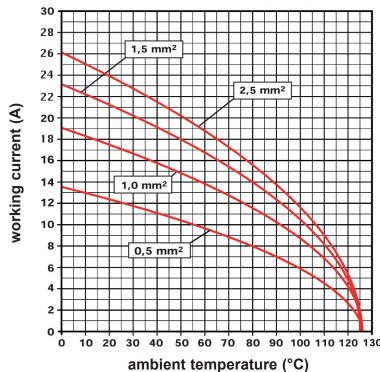
| description | part No. | part No. |
|---------------------------------------|-------------------|----------------|
| indirect, with plate ¹⁾ | | |
| female inserts with female contacts | CNEF 06 T | |
| male inserts with male contacts | CNEM 06 T | |
| direct, without plate ²⁾ | | |
| female inserts with female contacts | CNEF 06 TX | |
| male inserts with male contacts | CNEM 06 TX | |
| spring terminals with actuator button | | |
| female inserts with female contacts | | CSHF 06 |
| male inserts with male contacts | | CSHM 06 |

- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2
- certified
- 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 (CNE) - ≤ 3 mΩ (CSH)
- for max. current load see the connector inserts derating diagrams below; for more information see page 28

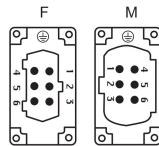
CNE 06 poles connector inserts
Maximum current load derating diagram



CSH 06 poles connector inserts
Maximum current load derating diagram



contacts side (front view)

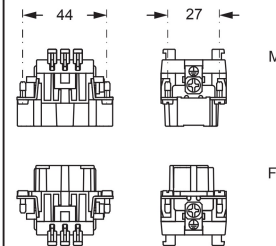


- inserts with plate for section conductors:
0,5 - 4 mm² - AWG 20 - 12
- inserts without plate for section conductors:
0,25 - 2,5 mm² - AWG 24 - 14
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

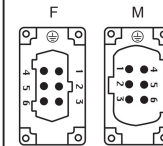
¹⁾ for unprepared conductors



²⁾ for conductors with end sleeve ferrule

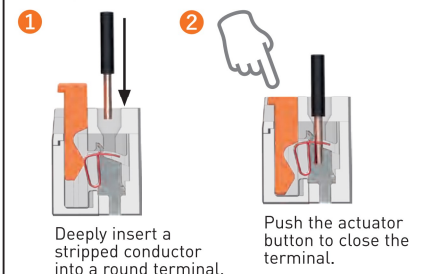


contacts side (front view)

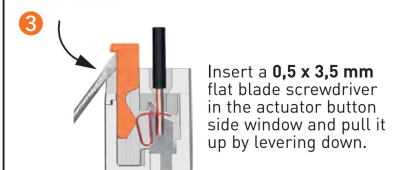


- inserts for conductors with the following sections:
0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm

SQUICH®-spring connection technology
WIRING



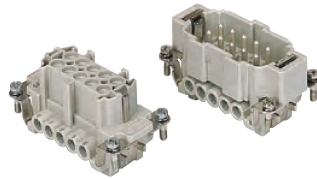
RE-OPENING



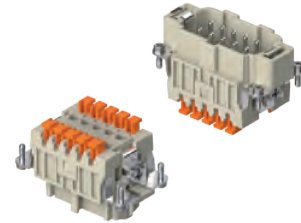
CNE CSH-SQUICH® 10 poles + ⊕ 16A - 500V

| | |
|--|---------------------------|
| enclosures: size "57.27" | page: |
| C-TYPE IP65 or IP66/IP69 | 393 - 401 |
| C7 IP67, two levers | 438 |
| V-TYPE IP65 or IP66/IP69, single lever | 448 - 453 |
| BIG hoods | 468 - 469 |
| T-TYPE IP65 insulating | 482 - 483 |
| T-TYPE / W IP66/IP69 insulating | 490 |
| HYGIENIC T-TYPE / H IP66/IP69 | 502 |
| HYGIENIC T-TYPE / C IP66/IP69, -50 °C | 507 |
| W-TYPE for aggressive environments | 522 |
| E-Xtreme® corrosion proof | 532 - 533, 543, 552 - 553 |
| EMC | 579 |
| Central lever | 606 - 608 |
| LS-TYPE | 620 - 621 |
| IP68 | 636 - 639 |
| panel supports: COB | page: 652 - 653 |

inserts,
screw terminal connections



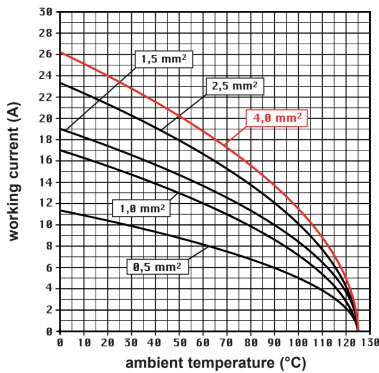
inserts,
spring terminal connections without tools



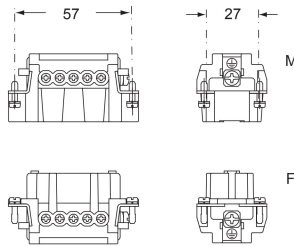
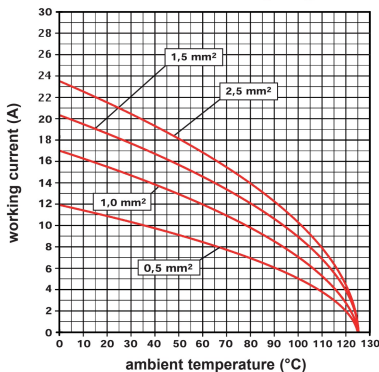
| description | part No. | part No. |
|---|--|----------------------------------|
| indirect, with plate ¹⁾ female inserts with female contacts male inserts with male contacts | CNEF 10 T CNEM 10 T | |
| direct, without plate ²⁾ female inserts with female contacts male inserts with male contacts | CNEF 10 TX CNEM 10 TX | |
| spring terminals with actuator button female inserts with female contacts male inserts with male contacts | | CSHF 10 CSHM 10 |

- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2
- us (UL for USA and Canada),
- certified
- 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 (CNE) - ≤ 3 mΩ (CSH)
- for max. current load see the connector inserts derating diagrams below; for more information see page 28

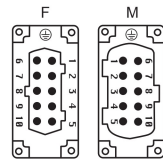
CNE 10 poles connector inserts
Maximum current load derating diagram



CSH 10 poles connector inserts
Maximum current load derating diagram



contacts side (front view)

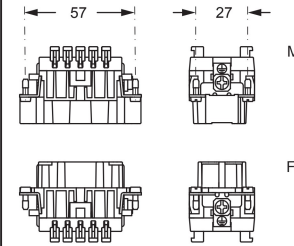


- inserts with plate for section conductors:
0,5 - 4 mm² - AWG 20 - 12
- inserts without plate for section conductors:
0,25 - 2,5 mm² - AWG 24 - 14
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

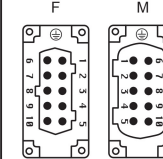
¹⁾ for unprepared conductors



²⁾ for conductors with end sleeve ferrule

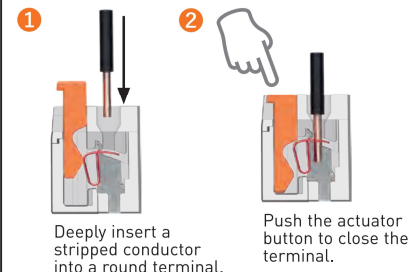


contacts side (front view)

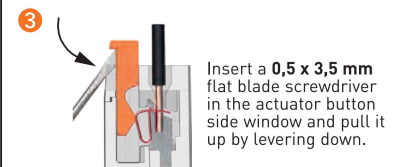


- inserts for conductors with the following sections:
0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm

SQUICH®-spring connection technology
WIRING



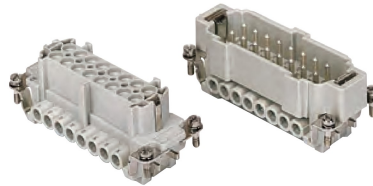
RE-OPENING



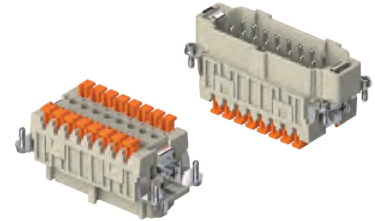
CNE CSH-SQUICH® 16 poles + ⊕ 16A - 500V

| | |
|--|---------------------------|
| enclosures: size "77.27" | page: |
| C-TYPE IP65 or IP66/IP69 | 402 - 411 |
| C7 IP67, two levers | 439 - 440 |
| V-TYPE IP65 or IP66/IP69, single lever | 454 - 458 |
| BIG hoods | 470 - 471 |
| T-TYPE IP65 insulating | 484 - 485 |
| T-TYPE / W IP66/IP69 insulating | 491 |
| HYGIENIC T-TYPE / H IP66/IP69 | 503 |
| HYGIENIC T-TYPE / C IP66/IP69, -50 °C | 508 |
| W-TYPE for aggressive environments | 523 |
| E-Xtreme® corrosion proof | 534 - 535, 544, 554 - 555 |
| EMC | 580 |
| Central lever | 609 - 611 |
| LS-TYPE | 622 - 623 |
| IP68 | 640 - 643 |
| panel supports: | page: |
| COB | 652 - 653 |

inserts,
screw terminal connections



inserts,
spring terminal connections without tools



| description | part No. | part No. |
|-------------|----------|----------|
|-------------|----------|----------|

indirect, with plate ¹⁾
 female inserts with female contacts
 male inserts with male contacts

CNEF 16 T
CNEM 16 T

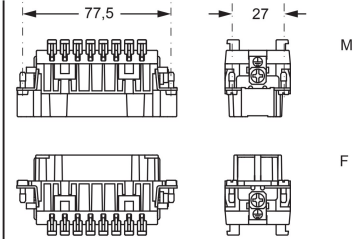
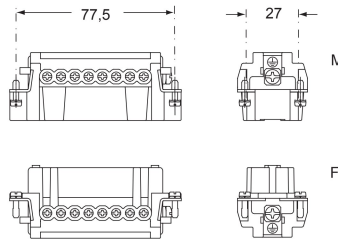
direct, without plate ²⁾
 female inserts with female contacts
 male inserts with male contacts

CNEF 16 TX
CNEM 16 TX

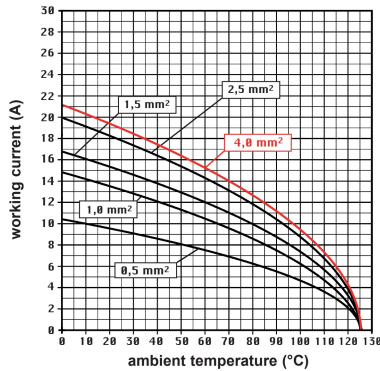
spring terminals with actuator button
 female inserts with female contacts
 male inserts with male contacts

CSHF 16
CSHM 16

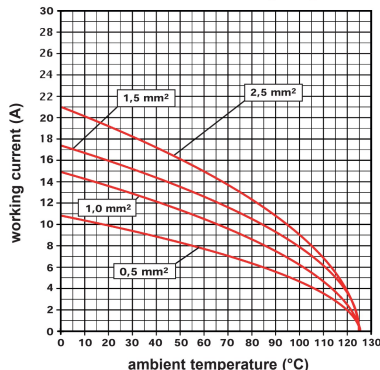
- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2
- cULus (UL for USA and Canada),
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 1 mΩ (CNE) - ≤ 3 mΩ (CSH)
- for max. current load see the connector inserts derating diagrams below; for more information see page 28



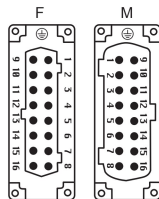
CNE 16 poles connector inserts
 Maximum current load derating diagram



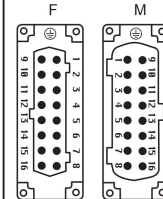
CSH 16 poles connector inserts
 Maximum current load derating diagram



contacts side (front view)



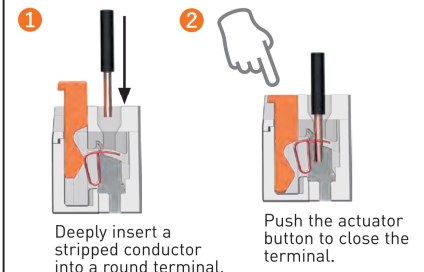
contacts side (front view)



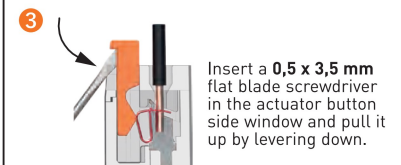
- inserts with plate for section conductors:
 0,5 - 4 mm² - AWG 20 - 12
- inserts without plate for section conductors:
 0,25 - 2,5 mm² - AWG 24 - 14
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

- inserts for conductors with the following sections:
 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm

SQUICH®-spring connection technology
WIRING



RE-OPENING



¹⁾ for unprepared conductors



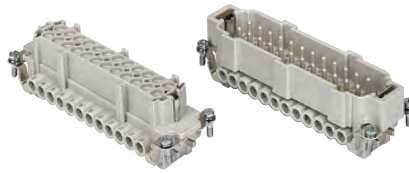
²⁾ for conductors with end sleeve ferrule



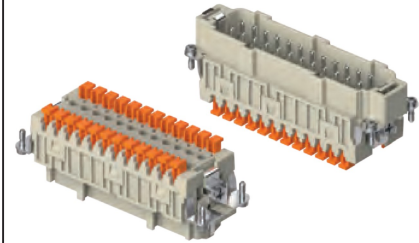
CNE CSH-SQUICH® 24 poles + ⊕ 16A - 500V

| | |
|--|---------------------------|
| enclosures: size "104.27" | page: |
| C-TYPE IP65 or IP66/IP69 | 412 - 423 |
| C7 IP67, two levers | 441 - 442 |
| V-TYPE IP65 or IP66/IP69, single lever | 459 - 463 |
| BIG hoods | 472 - 473 |
| T-TYPE IP65 insulating | 486 - 487 |
| T-TYPE / W IP66/IP69 insulating | 492 |
| HYGIENIC T-TYPE / H IP66/IP69 | 504 |
| HYGIENIC T-TYPE / C IP66/IP69, -50 °C | 509 |
| W-TYPE for aggressive environments | 524 |
| E-Xtreme® corrosion proof | 536 - 537, 545, 556 - 557 |
| EMC | 581 |
| Central lever | 612 - 614 |
| LS-TYPE | 624 - 625 |
| IP68 | 644 - 647 |
| panel supports: COB | page: 652 - 653 |

inserts,
screw terminal connections



inserts,
spring terminal connections without tools



description

part No.

part No.

indirect, with plate ¹⁾
female inserts with female contacts
male inserts with male contacts

CNEF 24 T
CNEM 24 T

direct, without plate ²⁾
female inserts with female contacts
male inserts with male contacts

CNEF 24 TX
CNEM 24 TX

spring terminals with actuator button
female inserts with female contacts
male inserts with male contacts

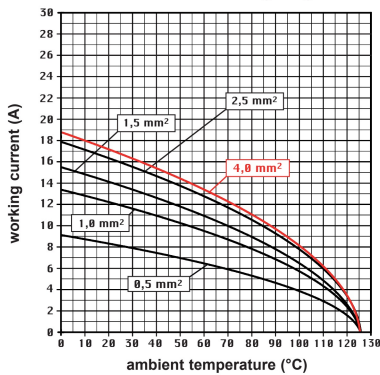
CSHF 24
CSHM 24

- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2

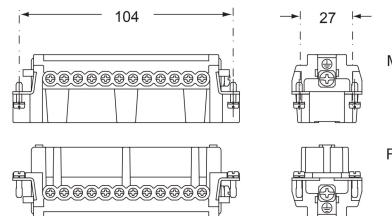
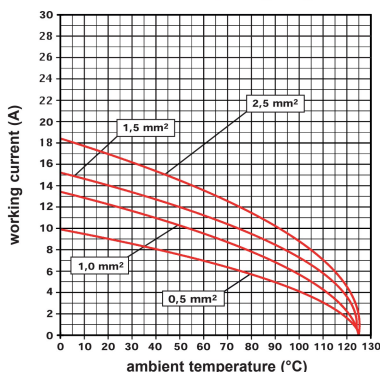
-
 certified

- 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: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$ (CNE) - $\leq 3 \text{ m}\Omega$ (CSH)
- for max. current load see the connector inserts derating diagrams below; for more information see page 28

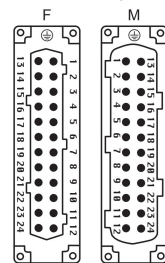
CNE 24 poles connector inserts
Maximum current load derating diagram



CSH 24 poles connector inserts
Maximum current load derating diagram



contacts side (front view)

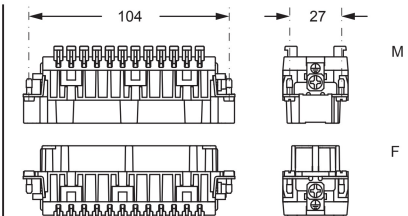


- inserts with plate for section conductors: 0,5 - 4 mm² - AWG 20 - 12
- inserts without plate for section conductors: 0,25 - 2,5 mm² - AWG 24 - 14
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

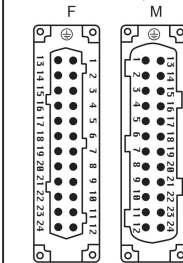
¹⁾ for unprepared conductors



²⁾ for conductors with end sleeve ferrule



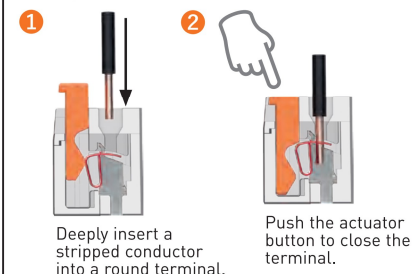
contacts side (front view)



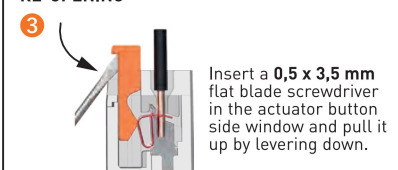
- inserts for conductors with the following sections: 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm

SQUICH®-spring connection technology

WIRING



RE-OPENING



CNE CSH-SQUICH® 32 poles + ⊕ 16A - 500V

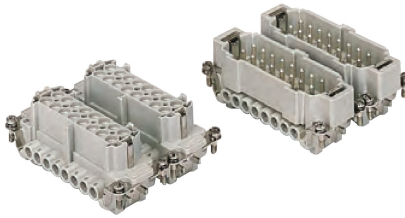
enclosures:
size "77.62"

page:

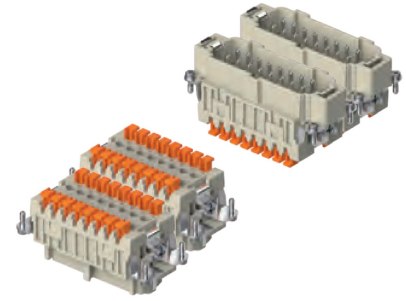
C-TYPE IP65 or IP66/IP69
W-TYPE for aggressive environments
E-Xtreme® corrosion proof

424 - 429
525
546

inserts,
screw terminal connections



inserts,
spring terminal connections without tools



| description | part No. | part No. | part No. | part No |
|---|--|--|----------------------------------|--------------------------------------|
| indirect, with plate ¹⁾ female inserts, No. (1-16) and (17-32) male inserts, No. (1-16) and (17-32) | CNEF 16 T CNEM 16 T | CNEF 16 TN CNEM 16 TN | | |
| direct, without plate ²⁾ female inserts, No. (1-16) and (17-32) male inserts, No. (1-16) and (17-32) | CNEF 16 TX CNEM 16 TX | CNEF 16 TXN CNEM 16 TXN | | |
| spring terminals with actuator button female inserts with female contacts, No. (1-16) and (17-32) male inserts with male contacts, No. (1-16) and (17-32) | | | CSHF 16 CSHM 16 | CSHF 16 N CSHM 16 N |

- characteristics according to EN 61984:

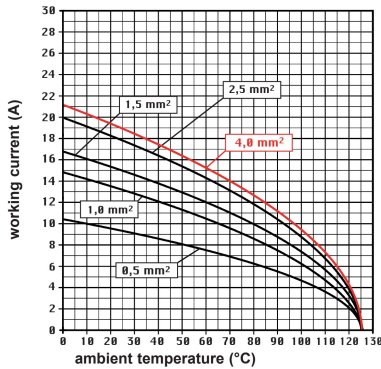
16A 500V 6kV 3
16A 400/690V 6kV 2

- cULus (UL for USA and Canada),

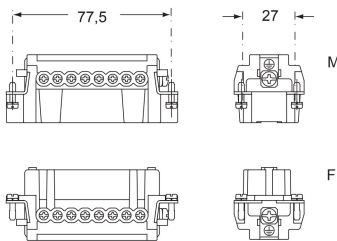
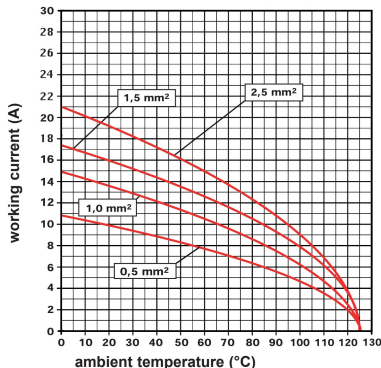
certified

- 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: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$ (CNE) - $\leq 3 \text{ m}\Omega$ (CSH)
- for max. current load see the connector inserts derating diagrams below; for more information see page 28

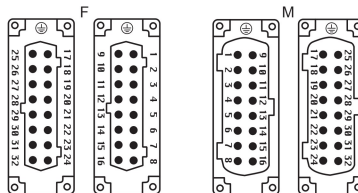
CNE 32 poles connector inserts
Maximum current load derating diagram



CSH 32 poles connector inserts
Maximum current load derating diagram



contacts side (front view)

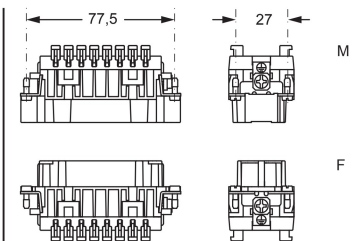


- inserts with plate for section conductors:
0,5 - 4 mm² - AWG 20 - 12
- inserts without plate for section conductors:
0,25 - 2,5 mm² - AWG 24 - 14
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

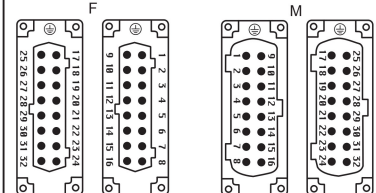
¹⁾ for unprepared conductors



²⁾ for conductors with end sleeve ferrule

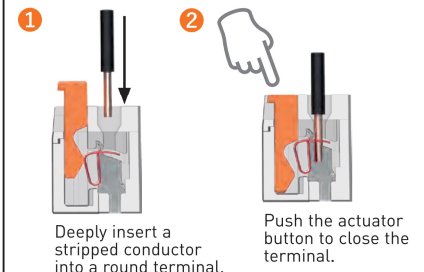


contacts side (front view)

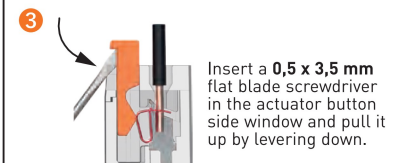


- inserts for conductors with the following sections:
0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm

SQUICH®-spring connection technology
WIRING



RE-OPENING



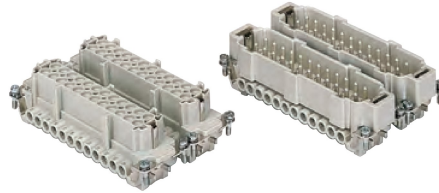
CNE CSH-SQUICH® 48 poles + ⊕ 16A - 500V

enclosures:
size "104.62"

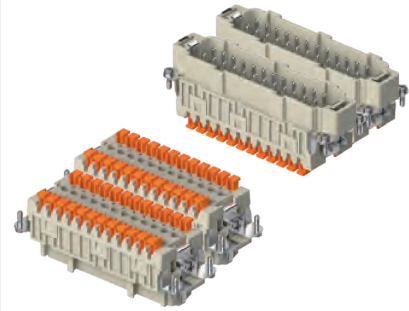
page:

| | |
|------------------------------------|-----|
| C-TYPE IP65 or IP66/IP69 | 430 |
| W-TYPE for aggressive environments | 526 |
| E-Xtreme® corrosion proof | 547 |

inserts,
screw terminal connections

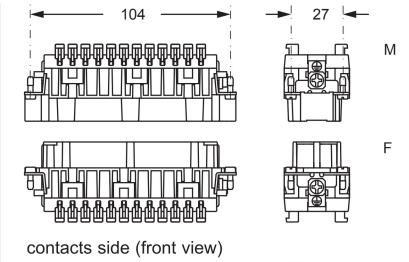
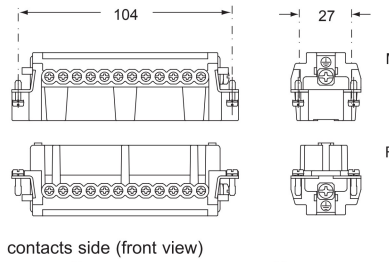


inserts,
spring terminal connections without tools

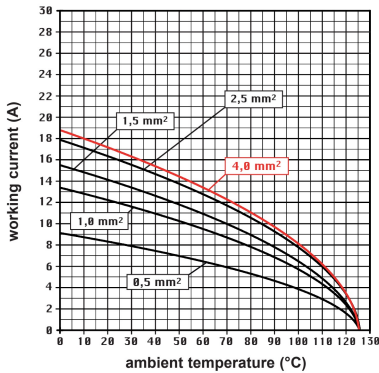


| description | part No. | part No. | part No. | part No |
|---|--|--|----------------------------------|--------------------------------------|
| indirect, with plate ¹⁾ female inserts, No. (1-24) and (25-48) male inserts, No. (1-24) and (25-48) | CNEF 24 T CNEM 24 T | CNEF 24 TN CNEM 24 TN | | |
| direct, without plate ²⁾ female inserts, No. (1-24) and (25-48) male inserts, No. (1-24) and (25-48) | CNEF 24 TX CNEM 24 TX | CNEF 24 TXN CNEM 24 TXN | | |
| spring terminals with actuator button female inserts with female contacts, No. (1-24) and (25-48) male inserts with male contacts, No. (1-24) and (25-48) | | | CSHF 24 CSHM 24 | CSHF 24 N CSHM 24 N |

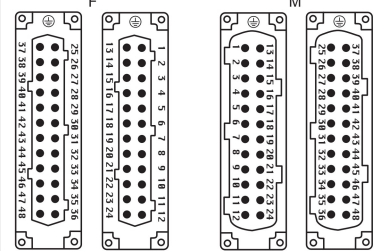
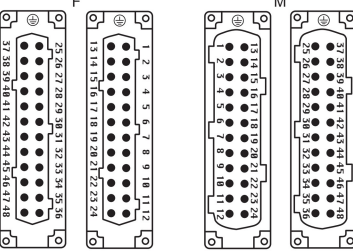
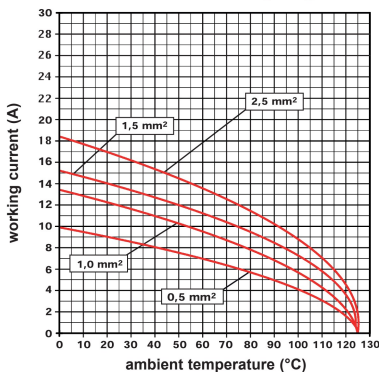
- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2
- us (UL for USA and Canada),
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$ (CNE) - $\leq 3 \text{ m}\Omega$ (CSH)
- for max. current load see the connector inserts derating diagrams below; for more information see page 28



CNE 48 poles connector inserts
Maximum current load derating diagram



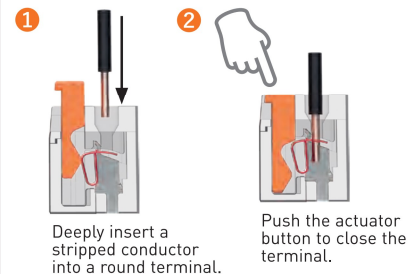
CSH 48 poles connector inserts
Maximum current load derating diagram



- inserts with plate for section conductors:
0,5 - 4 mm² - AWG 20 - 12
- inserts without plate for section conductors:
0,25 - 2,5 mm² - AWG 24 - 14
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

- inserts for conductors with the following sections:
0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm

SQUICH®-spring connection technology
WIRING



¹⁾ for unprepared conductors



²⁾ for conductors with end sleeve ferrule



RE-OPENING

