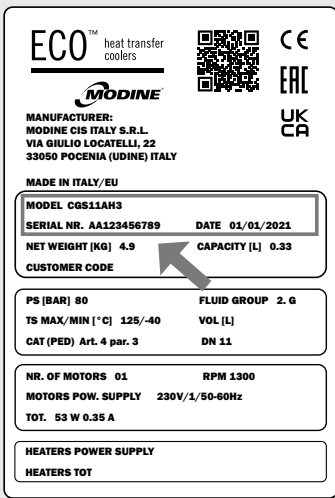


# CGS

# QUICK GUIDE

This document is a concise version of the model manual. This document is not meant to be a replacement of the manual. To download the full manual please scan the QRcode below or locate the data label on the model and scan the QRcode.



**ECO™** heat transfer coolers  
**MODINE**

MANUFACTURER:  
MODINE CIS ITALY S.R.L.  
VIA GIULIO LOCATELLI, 22  
33050 POCENIA (UDINE) ITALY

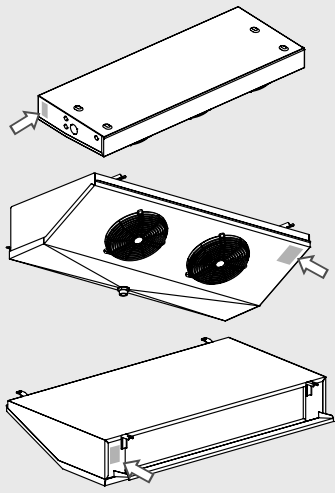
MADE IN ITALY/EU

MODEL CGS11AH3  
SERIAL NR. AA123456789 DATE 01/01/2021  
NET WEIGHT [KG] 4.9 CAPACITY [L] 0.33  
CUSTOMER CODE

PS [BAR] 80 FLUID GROUP 2. G  
TS MAX/MIN [°C] 125/-40 VOL [L]  
CAT (PED) Art. 4 par. 3 DN 11

NR. OF MOTORS 01 RPM 1300  
MOTORS POW. SUPPLY 230V/1/50-60Hz  
TOT. 53 W 0.35 A

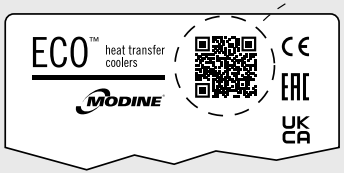
HEATERS POWER SUPPLY  
HEATERS TOT




CGS1

CGS2


CGS3



Link to user manuals:



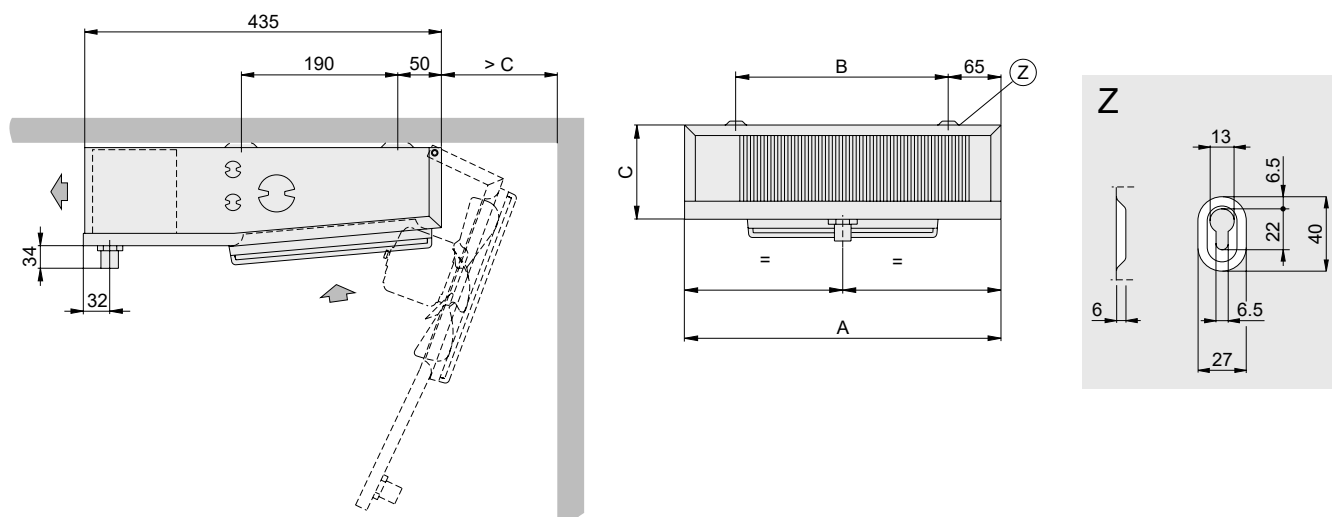
IT ES  
EN FR  
DE RU



Before removing the packaging, handling, assembling, positioning, commissioning of the machine and before performing any work on the model, download and carefully read all the information in the manual. If in doubt contact Modine.

## Construction and dimensional features

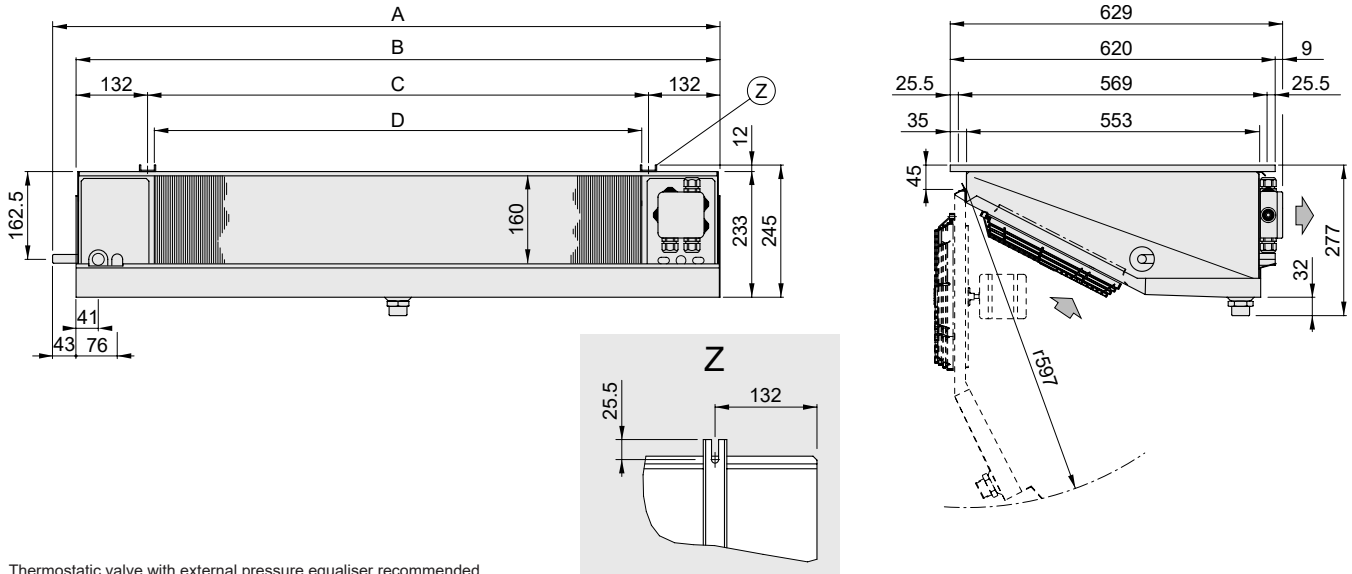
### CGS1 - Ø200 fan diameter unit



| Model            | CGS       | 11EH3 | 11AH3 | 12EH3 | 12AH3 | 12LH3 | 12MH3 | 13EH3 | 13AH3 | 13MH3 | 14MH3 |
|------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                  |           | 11EL4 | 11AL4 | 12EL4 | 12AL4 | 12LL4 | 12ML4 | 13EL4 | 13AL4 | 13ML4 | 14ML4 |
| Motorfans        | n° x Ø mm | 1x200 | 1x200 | 2x200 | 2x200 | 2x200 | 2x200 | 3x200 | 3x200 | 3x200 | 4x200 |
| Dimensions       | A         | 411   | 411   | 611   | 611   | 611   | 861   | 1111  | 1111  | 1111  | 1461  |
|                  | B         | 271   | 271   | 471   | 471   | 471   | 721   | 971   | 971   | 971   | 1321  |
|                  | C         | 120   | 120   | 120   | 120   | 170   | 170   | 120   | 120   | 170   | 170   |
| Coil connections | In (mm)   | 9.52  | 9.52  | 9.52  | 9.52  | 9.52  | 9.52  | 9.52  | 9.52  | 9.52  | 9.52  |
|                  | Out (mm)  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  |
| Drain connection | Ø (GAS)   | 1/2"  | 1/2"  | 1/2"  | 1/2"  | 1/2"  | 1/2"  | 1/2"  | 1/2"  | 1/2"  | 1/2"  |
| Net weight       | kg        | 4.3   | 4.9   | 7.1   | 7.7   | 10.7  | 13.8  | 11.1  | 12.1  | 17.0  | 23.0  |

Thermostatic valve with external pressure equaliser recommended

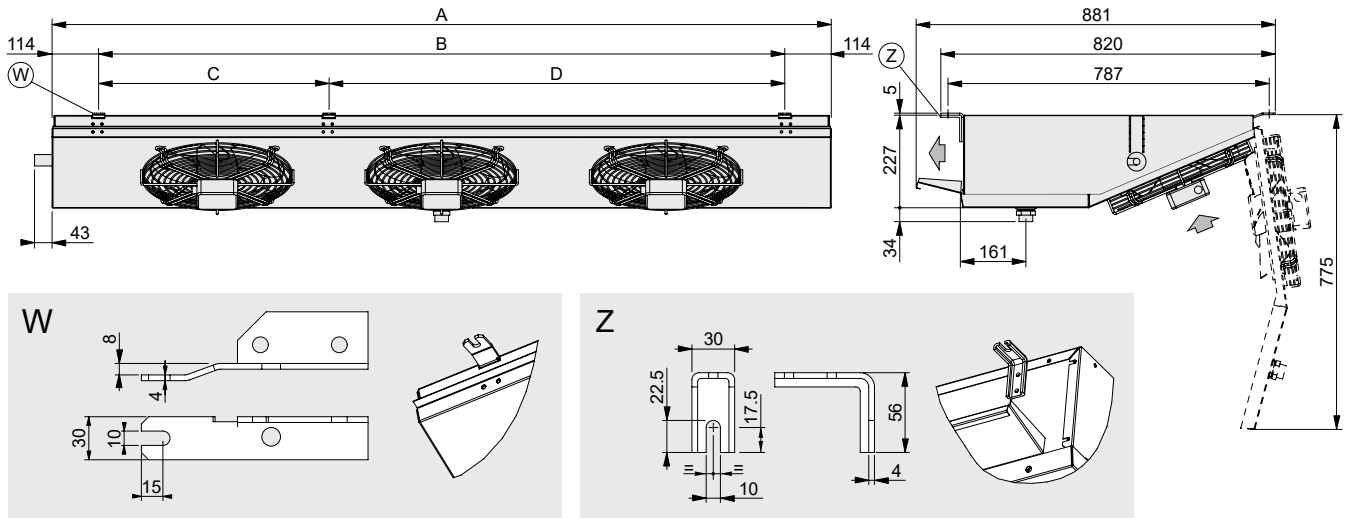
**CGS2 - Ø250 fan diameter unit**



Thermostatic valve with external pressure equaliser recommended

| Model            | CGS       | 21GH4 | 21EH4 | 21FL7 | 22GH4 | 22EH4 | -     | 22FL7 | 23GH4 | 23EH4 | 23FL7 | 24GH4 | 24EH4 | 24FL7 |
|------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                  | 21GL7     | 21EL7 | -     | 22GL7 | -     | 22EL7 | -     | -     | -     | 23EL7 | -     | -     | 24EL7 | -     |
| Motorfans        | n° x Ø mm | 1x250 | 1x250 | 1x250 | 2x250 | 2x250 | 2x250 | 2x250 | 3x250 | 3x250 | 3x250 | 4x250 | 4x250 | 4x250 |
| Dimensions       | A         | 782   | 782   | 782   | 1232  | 1232  | 1232  | 1232  | 1682  | 1682  | 1682  | 2132  | 2132  | 2132  |
|                  | B         | 739   | 739   | 739   | 1189  | 1189  | 1189  | 1189  | 1639  | 1639  | 1639  | 2089  | 2089  | 2089  |
|                  | C         | 475   | 475   | 475   | 925   | 925   | 925   | 925   | 1375  | 1375  | 1375  | 1825  | 1825  | 1825  |
|                  | D         | 451   | 451   | 451   | 901   | 901   | 901   | 901   | 1351  | 1351  | 1351  | 1801  | 1801  | 1801  |
| Coil connections | In (mm)   | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  |
|                  | Out (mm)  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  |
| Drain connection | Ø (GAS)   | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    | 1"    |
| Net weight       | kg        | 12    | 13    | 13    | 19    | 21    | 21    | 21    | 26    | 28    | 28    | 32    | 35    | 36    |

**CGS3 - Ø315 fan diameter unit**



| Model            | CGS       | 31AH4 | 32AH4 | 33AH4 | 34AH4 |
|------------------|-----------|-------|-------|-------|-------|
|                  | 31BL7     | 32BL7 | 33BL7 | 34BL7 |       |
| Motorfans        | n° x Ø mm | 1x315 | 2x315 | 3x315 | 4x315 |
| Dimensions       | A         | 810   | 1360  | 1910  | 2460  |
|                  | B         | 582   | 1132  | 1682  | 2232  |
|                  | C         | -     | -     | 565   | 1115  |
|                  | D         | -     | -     | 1117  | 1117  |
| Coil connections | In (mm)   | 12.7  | 12.7  | 12.7  | 12.7  |
|                  | Out (mm)  | 12.7  | 12.7  | 15.87 | 15.87 |
| Drain connection | Ø (GAS)   | 1"    | 1"    | 1"    | 1"    |
| Net weight       | kg        | 19    | 31    | 48    | 65    |

Thermostatic valve with external pressure equaliser recommended

## Wiring diagrams

### Motor-fan connection diagram

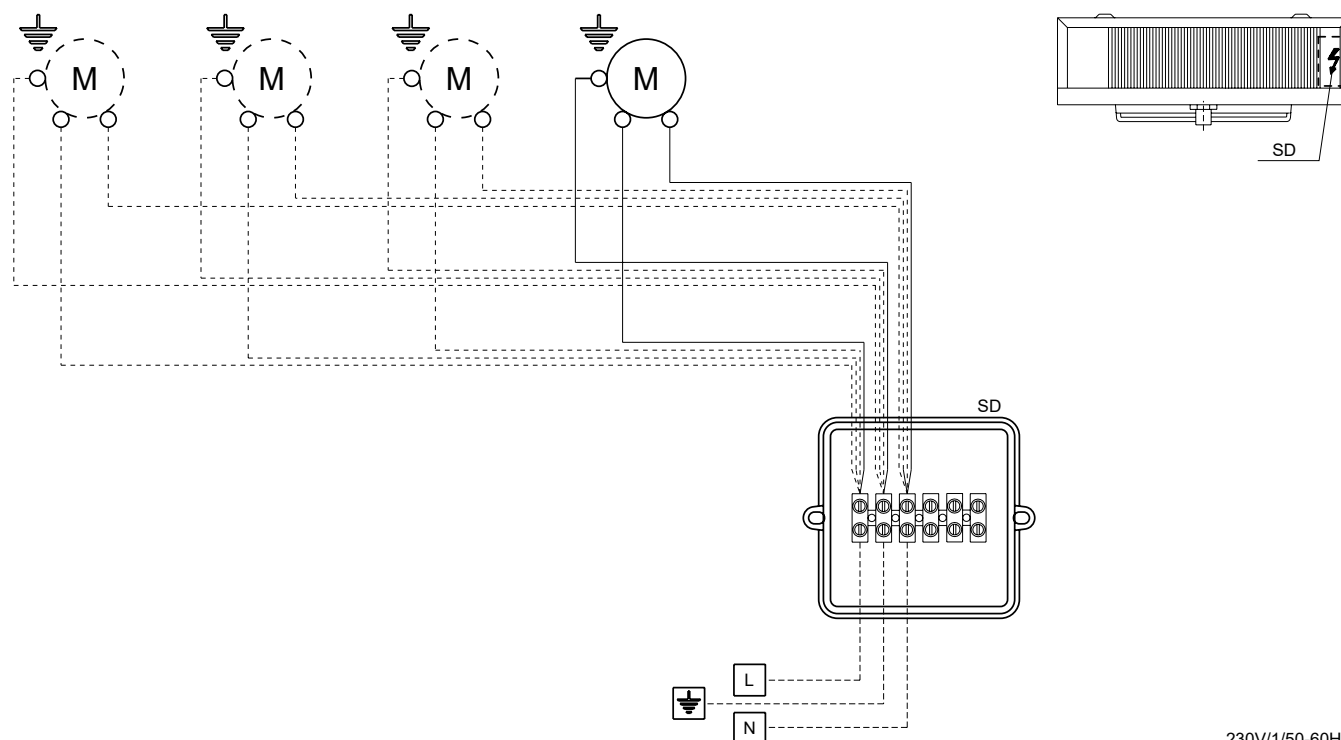
**Important.** The motors are equipped with inner thermal protection with automatic reconnection. Before using motor speed control systems verify the compatibility with the motors. Non compatible systems may damage motors or increase noise level; Modine will not be responsible for model performance with speed control systems. For fans equipped with thermal contacts (TK), these must be connected to the control circuit. For models supplied with wiring in a junction box, remove the cover to make the connection.

| Model                  | CGS       | 11EH3 | 11AH3 | 12EH3 | 12AH3 | 12LH3 | 12MH3 | 13EH3 | 13AH3 | - | 13MH3 | 14MH3 |
|------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|---|-------|-------|
|                        |           | 11EL4 | 11AL4 | 12EL4 | 12AL4 | 12LL4 | 12ML4 | 13EL4 | 13AL4 | - | 13ML4 | 14ML4 |
| Motorfans              | n° x Ø mm | 1x200 |       | 2x200 |       |       |       | 3x200 |       |   | 4x200 |       |
| Frequency              | Hz        | 50    | 60    | 50    | 60    | 50    | 60    | 50    | 60    |   | 50    | 60    |
| Electrical consumption | A         | 0.35  | 0.35  | 0.70  | 0.70  | 1.05  | 1.05  | 1.05  | 1.05  |   | 1.40  | 1.40  |
|                        | W         | 53    | 53    | 106   | 106   | 159   | 159   | 159   | 159   |   | 212   | 212   |
| RPM                    |           | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  |   | 1300  | 1300  |

| Model                  | CGS       | 21GH4 | 21FL7 | 22GH4 | 22FL7 | 23GH4 | 23FL7 | 24GH4 | 24FL7 |
|------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
|                        |           | 21GL7 | -     | 22GL7 | -     | -     | -     | -     | -     |
|                        |           | 21EH4 | -     | 22EH4 | -     | 23EH4 | -     | 24EH4 | -     |
|                        |           | 21EL7 | -     | 22EL7 | -     | 23EL7 | -     | 24EL7 | -     |
| Motorfans              | n° x Ø mm | 1x250 |       | 2x250 |       | 3x250 |       | 4x250 |       |
| Frequency              | Hz        | 50    | 60    | 50    | 60    | 50    | 60    | 50    | 60    |
| Electrical consumption | A         | 0.64  | 0.64  | 1.28  | 1.28  | 1.92  | 1.92  | 2.56  | 2.56  |
|                        | W         | 83    | 83    | 166   | 166   | 249   | 249   | 332   | 332   |
| RPM                    |           | 1350  | 1500  | 1350  | 1500  | 1350  | 1500  | 1350  | 1500  |

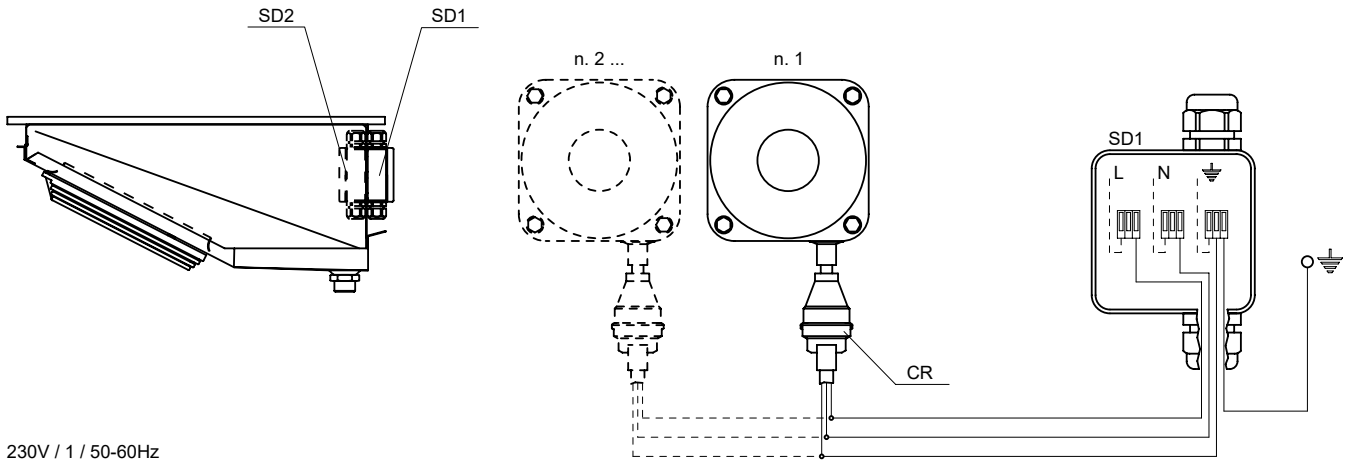
| Model                  | CGS       | 31AH4 | 32AH4 | 33AH4 | 34AH4 |
|------------------------|-----------|-------|-------|-------|-------|
|                        |           | 31BL7 | 32BL7 | 33BL7 | 34BL7 |
| Motorfans              | n° x Ø mm | 1x315 |       | 2x315 |       |
| Frequency              | Hz        | 50    | 60    | 50    | 60    |
| Electrical consumption | A         | 0.43  | 0.58  | 0.86  | 1.16  |
|                        | W         | 96    | 130   | 192   | 260   |
| RPM                    |           | 1340  | 1490  | 1340  | 1490  |

### CGS1 - Ø200 fan diameter unit




230V/1/50-60Hz

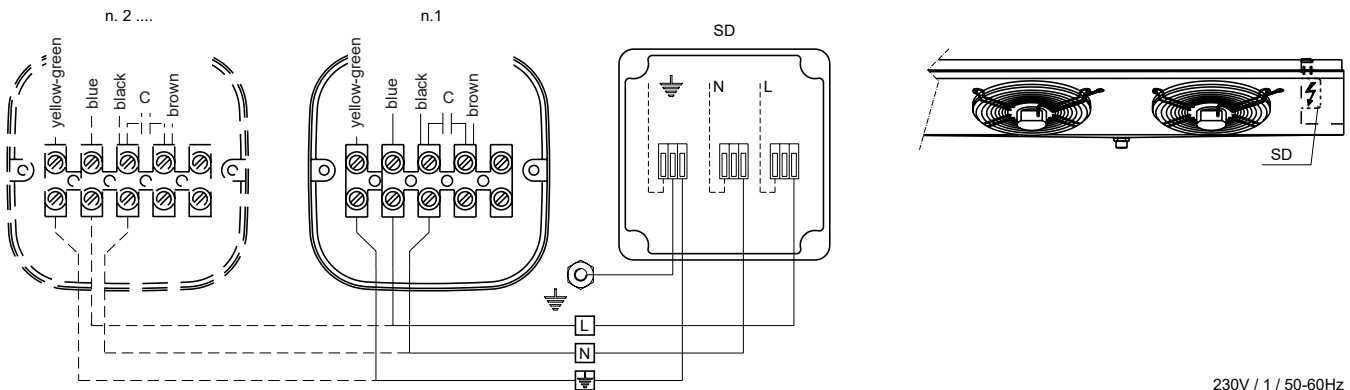
CGS2 - Ø250 fan diameter unit




230V / 1 / 50-60Hz

-  = yellow-green
- L = brown
- N = blue
- SD1 = motorfan junction box
- SD2 = electric heater junction box
- CR = cable quick connection

CGS3 - Ø315 fan diameter unit



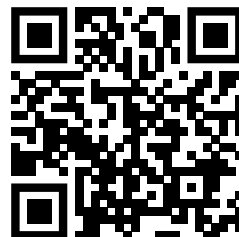
230V / 1 / 50-60Hz

-  = yellow-green
- L = brown
- N = blue
- SD = junction box



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Link to user manuals:



<https://www.modinecoolers.com/documents/>