

CCF

Functional characteristics



Dimensional class:
medium



Standard colour:
green



Dimensions:
25.4 x 14.9 mm
(1 x .571 in)



Max approved wire size:
2.5 mm² (IEC EN); 12 AWG (UL)
wire entry size
2.3 x 2.9 mm (.091 x .114 in)



Versions:
side stackable,



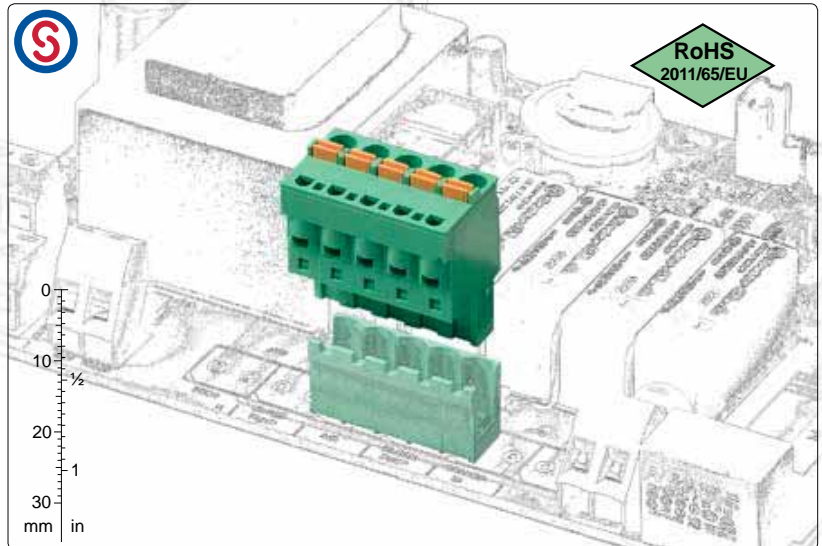
locking screw flanges
Single mould poles:
from 2 to 18 (side stackable)
from 2 to 10 (locking screw flanges)



Pitches:
metric 5 mm, 10 mm
(.197 in, .394 in)



imperial 5.08 mm, 10.16 mm
(.200 in, .400 in)



available accessories:
from 2 to 6 poles
BSC for spring connections
See also "Accessories", page 268



pitch 5/5.08 mm
from 2 to 25 poles
straight version, side stackable



pitch 5/5.08 mm
from 2 to 23 poles
straight version, locking screw flange

Brief description

The **CCF** series of female connectors (Connector, Clip, Female) is the ideal solution if, due to the layout of the PCB, extractable connectors are needed where the entry direction of the wire is parallel to the direction of the tightening command, maintaining a tightening force comparable to the rising clamp technology.

Moreover by using a spring system wiring is quickly done and is unaffected by vibrations. Both hard or flexible wires with ferrules can be used but flexible wires without ferrules can also be used by pressing on the appropriate switch.

The **CCF** connector series of PCBs is characterized by an asymmetric profile, so mistakes are prevented when connections are made with the relative **CIM**, **CPM** or **CRM** male connector soldered to the board

or the **CGM** screw connection. Further safety when connecting can be obtained by using the CIF-LC1 and CIM-SCI Coding Splines and Coding Clips (see page 20-21) or COF-SP1 Polarization Pegs (see page 18-19).

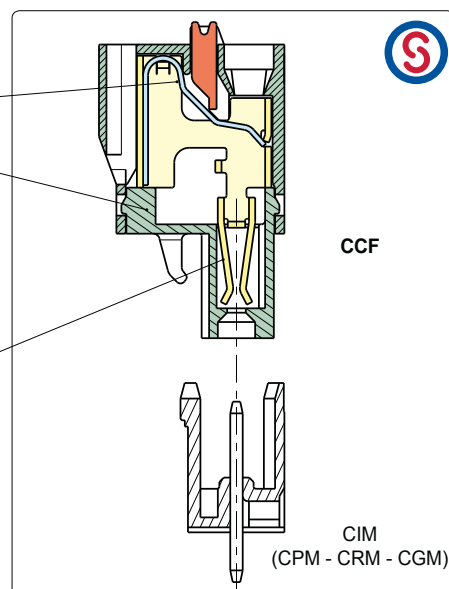
It is possible to side-stack or assemble the basic modular connectors in order to obtain any number of poles without losing the pitch. By taking advantage of this particular characteristic a minimum stock of basic connectors can be kept.

It is simple to manage the product, the warehouse and the assembly with the Kit packages because several versions can be received with only one code, the part-numbers are significantly reduced and the risk of making mistakes is also reduced.



Characteristics of components

- Steel clamping spring.
- Polyamide housing.
Standard colour: GREEN.
V0 Self-extinguishing according to UL 94.
Chlorinated solvents resistant,
with no phosphor, dioxin or detrimental to health halogens.
Material Group I (CTI \geq 600 V)
- Lead-free tin-plated copper alloy spring.



Mechanical characteristics

Insertion force per pole	max 3 N (.674 lbf)
Withdrawal force per pole	min 1,5 N (.337 lbf)
Stripping length	10 mm (.39 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 According to EN 60068-1

Electric characteristics*

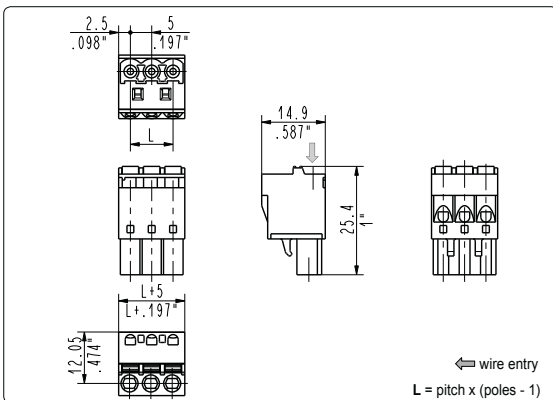
Solid wire section	0.2 ÷ 2.5 mm ² (IEC EN)* 30÷12 AWG (UL)*
Stranded wire section	0.2 ÷ 2.5 mm ² (IEC EN)* 30÷12 AWG (UL)*
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in) pitch	300 V (UL)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in) pitch	750 V (IEC EN)*
Rated current	12 A (UL)*
Contact resistance	<15 mΩ
Insulation resistance	>10 ⁹ Ω (500V DC)

*All the a.m. data refer to the highest values amongst the certificated ones.

V voltage, I current values and tightening torque are related to the norms to be applied to the product and to its use.

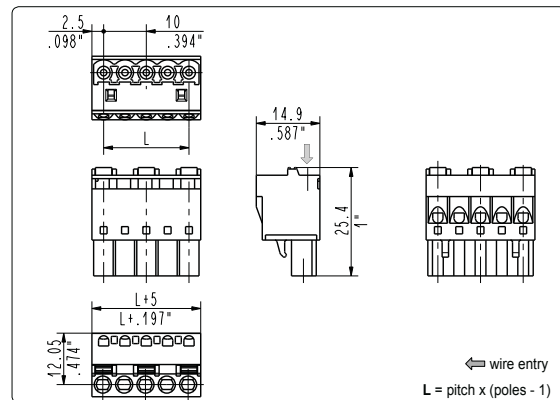
Approvals

IEC-EN	IEC:	250 V - T 110 - 12 A - 2.5 mm ² solid and stranded for 5 mm (.197 in) and 5.08 mm (.200 in) pitch
	EN 61984	750 V - T 110 - 12 A - 2.5 mm ² solid and stranded for 10 mm (.394 in) and 10.16 mm (.400 in) pitch
UL	UL:	300 V - 12 A - 30÷12 AWG stranded for 5 mm (.197 in), 5.08 mm (.200 in) pitch
	File E167473	600 V - 12 A - 30÷12 AWG stranded for 10 mm (.394 in) and 10.16 mm (.400 in) pitch
		Application values for end-use equipment have to be in accordance to UL norms and applicable to it.

**CCF_001** side stackable, female

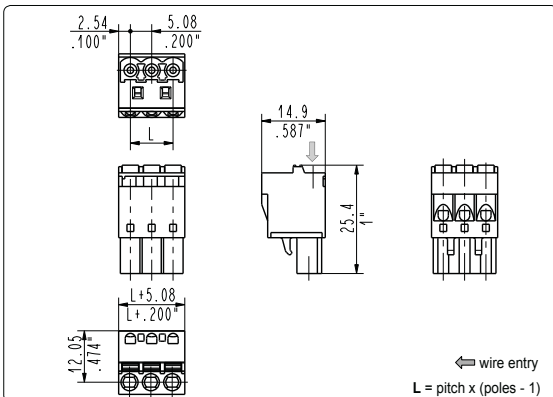
5 mm / .197" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF02001	350	1,33	1500	5,70
03	CCF03001	300	1,71	1000	5,70
04	CCF04001	200	1,52	750	5,70
05	CCF05001	200	1,90	750	7,13
06	CCF06001	150	1,71	500	5,70
07	CCF07001	125	1,66	500	6,65
08	CCF08001	100	1,52	500	7,60
09	CCF09001	75	1,28	500	8,55
10	CCF10001	50	0,95	250	4,75
11	CCF11001	50	1,05	250	5,23
12	CCF12001	50	1,14	250	5,70
13	CCF13001	50	1,24	250	6,18
14	CCF14001	50	1,33	250	6,65
15	CCF15001	50	1,43	250	7,13
16	CCF16001	50	1,52	250	7,60
17	CCF17001	50	1,62	250	8,08
18	CCF18001	50	1,71	250	8,55

**CCF_002** side stackable, female

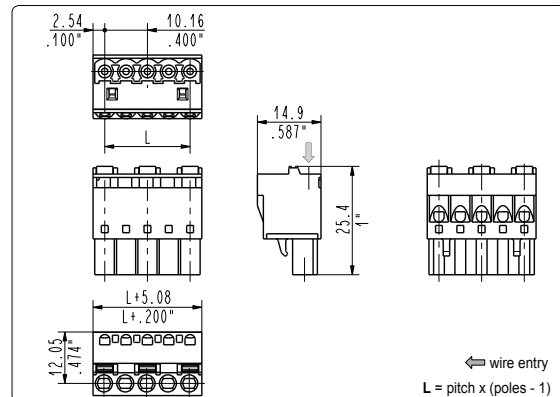
10 mm / .394" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF02002	300	1,31	1000	4,36
03	CCF03002	200	1,31	750	4,91
04	CCF04002	125	1,09	500	4,36
05	CCF05002	75	0,82	500	5,45
06	CCF06002	50	0,65	250	3,27
07	CCF07002	50	0,76	250	3,82
08	CCF08002	50	0,87	250	4,36
09	CCF09002	50	0,98	250	4,91

**CCF_005** side stackable, female

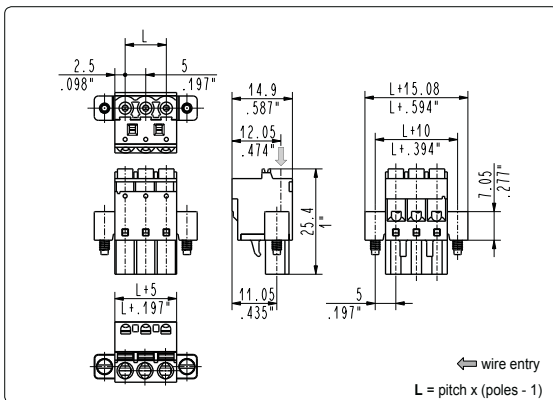
5.08 mm / .200" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF02005	350	1,33	1500	5,7
03	CCF03005	300	1,71	1000	5,7
04	CCF04005	200	1,52	750	5,7
05	CCF05005	200	1,90	750	7,13
06	CCF06005	150	1,71	500	5,7
07	CCF07005	125	1,66	500	6,65
08	CCF08005	100	1,52	500	7,6
09	CCF09005	75	1,28	500	8,55
10	CCF10005	50	0,95	250	4,75
11	CCF11005	50	1,05	250	5,23
12	CCF12005	50	1,14	250	5,7
13	CCF13005	50	1,24	250	6,18
14	CCF14005	50	1,33	250	6,65
15	CCF15005	50	1,43	250	7,13
16	CCF16005	50	1,52	250	7,6
17	CCF17005	50	1,62	250	8,08
18	CCF18005	50	1,71	250	8,55
19	CCF19005	50	1,80	125	4,51
20	CCF20005	50	1,90	125	4,75
21	CCF21005	50	1,99	125	4,99
22	CCF22005	50	2,09	125	5,22

**CCF_006** side stackable, female

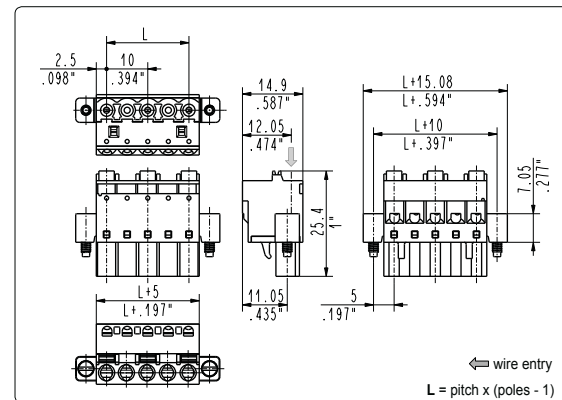
10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF02006	300	1,31	1000	4,36
03	CCF03006	200	1,31	750	4,91
04	CCF04006	125	1,09	500	4,36
05	CCF05006	75	0,82	500	5,45
06	CCF06006	50	0,65	250	3,27
07	CCF07006	50	0,76	250	3,82
08	CCF08006	50	0,87	250	4,36
09	CCF09006	50	0,98	250	4,91
10	CCF10006	50	1,09	125	2,72
11	CCF11006	50	1,09	125	3,00

**CCF_0V1** locking screw flanges, female

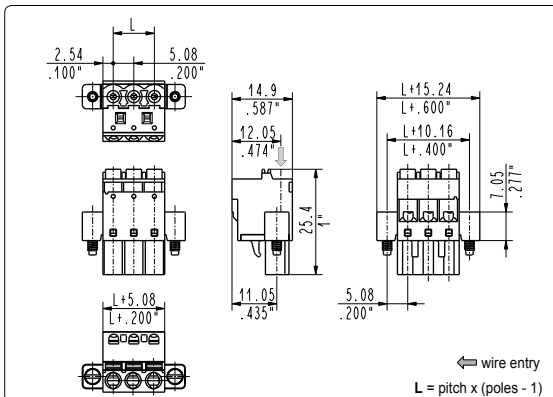
5 mm / .197" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF020V1	350	1,61	1500	6,90
03	CCF030V1	300	1,95	1000	6,50
04	CCF040V1	200	1,68	750	6,30
05	CCF050V1	200	2,06	750	7,73
06	CCF060V1	150	1,83	500	6,10
07	CCF070V1	125	1,76	500	7,05
08	CCF080V1	100	1,60	500	8,00

**CCF_0V2** locking screw flanges, female

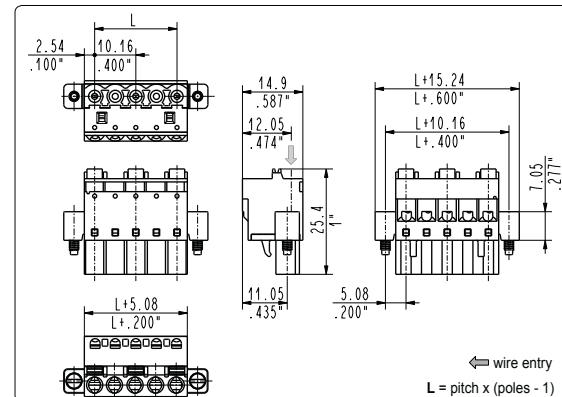
10 mm / .394" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF020V2	300	1,43	1000	4,76
03	CCF030V2	200	1,43	750	5,36
04	CCF040V2	125	1,19	500	4,76

**CCF_0V5** locking screw flanges, female

5.08 mm / .200" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF020V5	350	1,61	1500	6,90
03	CCF030V5	300	1,95	1000	6,50
04	CCF040V5	200	1,68	750	6,30
05	CCF050V5	200	2,06	750	7,73
06	CCF060V5	150	1,83	500	6,10
07	CCF070V5	125	1,76	500	7,05
08	CCF080V5	100	1,60	500	8,00
09	CCF090V5	75	1,34	500	8,95
10	CCF100V5	50	0,99	250	4,95
11	CCF110V5	50	1,09	250	5,43
12	CCF120V5	50	1,18	250	5,90
13	CCF130V5	50	1,28	250	6,38
14	CCF140V5	50	1,37	250	6,85
15	CCF150V5	50	1,47	250	7,33
16	CCF160V5	50	1,56	250	7,80
17	CCF170V5	50	1,66	250	8,28
18	CCF180V5	50	1,75	250	8,75
19	CCF190V5	50	1,84	125	4,61
20	CCF200V5	50	1,94	125	4,85
21	CCF210V5	50	2,03	125	5,09
22	CCF220V5	50	2,13	125	5,32

**CCF_0V6** locking screw flanges, female

10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CCF020V6	300	1,55	1000	5,16
03	CCF030V6	200	1,47	750	5,51
04	CCF040V6	125	1,19	500	4,76
05	CCF050V6	75	0,88	500	5,85
06	CCF060V6	50	0,69	250	3,47
07	CCF070V6	50	0,80	250	4,02
08	CCF080V6	50	0,91	250	4,56
09	CCF090V6	50	1,02	250	5,11
10	CCF090V6	50	1,13	125	2,82
11	CCF090V6	50	1,13	125	3,10