

**Multiconductor - PVC/PVC - 0.6/1KV - IRAM 2178-1 - 70°C  
Gr/Ye earth conductor**



**FC COPERINT®**  
Multiconductor, class 5,  
with Gr/Ye earth conductor



**Applications**

Suitable for overhead trays, direct earth burial or duct-buried installations. Fixed power distribution networks in factories, warehouses, machine rooms, power distribution stations, etc.

**Features**

- Temperature rating: 70°C (operating), 160 C (short circuit).
- Voltage rating: 600/1000V AC, maximum 1200V AC / 1500V DC
- Construction requirements: As per IEC 60502-1 / IRAM 2178-1.
- Fire requirements: As per IEC 60332-3-24 / IRAM NM IEC 60332-3-24 - Fire-retardancy.
- Conductor requirements: As per IEC 60228 / IRAM NM 280.

**Description**

Conductor: Annealed electrolytic copper; class 5 stranding.  
Insulation: PVC.  
Identification:

- 3 Conductors: 
- 4 Conductors: 
- 5 Conductors: 

Sheath: Violet PVC; fire-retardant.

**Outstanding Features**



Grounded  
Conductor



Flexible Stranded  
Conductors



Industrial  
Applications



Sequentially  
Marked



Fire-retardant

**Optionals**

Armour: Double aluminium tape spiral wrap (in single-conductor cables) and helical wire wrap or double zinc-plated steel tape spiral wrap (in multiconductor cables).

**Alternatives**

Conductor: Class 2 semi-rigid stranded cable can be supplied upon request.

**Installation**

Assembly: Minimum bend radius is 7xOD (unarmoured versions) or 12xOD (armoured versions).

Maximum pulling tension: 5daN/sq mm on copper conductors. Wire-armoured cables can withstand 10daN/sq mm on the armour wires.

Assembly temperature: 5 C or higher.

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Stranding alternative  
class 2 (NC)

#### Electrical Characteristics

Nominal cross-section sq mm	Electrical resistance at 70°C in AC Ohm/km	Inductive reactance at 50hz Multiconductor Ohm/km	Current-carrying capacity in free air (1)	Current-carrying capacity in earth (2)
			3x (3) Ampere	3x (3) Ampere
1	23.33	0.112	N/A	N/A
1.5	15.91	0.104	15.3	23.8
2.5	9.55	0.097	20.9	32.3
4	5.92	0.097	28.5	41.8
6	3.95	0.091	35.2	52.3
10	2.29	0.084	49.4	70.3
16	1.45	0.080	66.5	90.3
25	0.933	0.080	83.6	116.9
35	0.663	0.078	104.5	139.7
50	0.462	0.077	126.4	164.4
70	0.326	0.074	161.5	200.5
95	0.247	0.074	196.7	241.3
120	0.194	0.072	228.0	275.5
150	0.156	0.072	263.2	308.8
185	0.129	0.072	301.2	350.6
240	0.0986	0.072	355.3	406.6
300	0.0802	0.071	410.4	459.8

(1) Cables installed in free air at 40°C according to IEC 364-5-523.

(2) Cables directly buried in earth at a ground temperature of 25°C with ground specific thermal resistivity of 1K.m/W.

(3) The values also apply to 4-conductor and 5-conductor cables.

For further information about current-carrying capacity values and types of installations refer to IEC 364-5-523 and the regulations for electrical installations in buildings defined by Argentina's Electrotechnical Association (in Spanish, "Reglamentación para la ejecución de Instalaciones eléctricas en inmuebles", part 7 section 771).

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**Dimensions & Weight**

Conductors per cross-section N° x sq mm	Standard			Armoured			
	Code	Outside diameter mm	Weight kg/km	Code	Under armour diameter mm	Outside diameter mm	Weight kg/km
3x1	FC 0310	9,1	111	FC 0310 H	8,1	13,3	312
3x1,5	FC 0315	9,8	136	FC 0315 H	8,8	14	350
3x2,5	FC 0325	10,8	174	FC 0325 H	9,8	15	409
3x4	FC 0340	12,6	250	FC 0340 H	11,6	16,8	523
3x6	FC 0360	14	327	FC 0360 F	13	17,8	583
3x10	FC 3100	16,3	486	FC 3100 F	15,3	20,1	783
3x16	FC 3160	20,9	798	FC 3160 F	17,3	22,1	1005
3x25	FC 3250	24,4	1151	FC 3250 F	20,8	25,6	1396
3x35	FC 3350	26,6	1480	FC 3350 F	23	27,8	1750
3x50	FC 3500	30,4	2009	FC 3500 F	26,8	31,8	2335
3x70	FC 3700	35,6	2812	FC 3700 F	31,6	36,8	3178
3x95	FC 3950	40,9	3680	FC 3950 F	36,7	43,1	4412
3x120	FC 31200	44,2	4745	FC 31200 F	39,8	46,4	5535
3x150	FC 31500	50,4	5673	FC 31500 F	45,8	52,6	6578
3x185	FC 31850	54,7	6823	FC 31850 F	49,7	56,9	7803
3x240	FC 32400	62,8	8996	FC 32400 F	57,4	65	10125
3x300	FC 33000	70,1	11156	FC 33000 F	64,3	72,1	12386

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Conductors per cross-section N° x sq mm	Standard			Armoured			
	Code	Outside diameter mm	Weight kg/km	Code	Under armour diameter mm	Outside diameter mm	Weight kg/km
4x1	FC 0410	9,9	133	FC 0410 H	8,9	14,1	350
4x1,5	FC 0415	10,6	161	FC 0415 H	9,6	14,8	392
4x2,5	FC 0425	11,7	208	FC 0425 H	10,7	15,9	461
4x4	FC 0440	13,8	306	FC 0440 H	12,8	18	601
4x6	FC 0460	15,3	400	FC 0460 F	14,3	19,1	679
4x10	FC 4100	17,9	602	FC 4100 F	16,9	21,7	926
4x16	FC 4160	22,8	978	FC 4160 F	19,2	24	1205
3x25+1x16	FC 2516	25,7	1309	FC 2516 F	22,1	26,9	1563
3x35+1x16	FC 3516	27,5	1619	FC 3516 F	23,9	28,7	1892
3x50+1x25	FC 5025	31,9	2248	FC 5025 F	28,1	33,1	2577
3x70+1x35	FC 7035	36,8	3103	FC 7035 F	32,8	38	3452
3x95+1x50	FC 9550	42,6	4117	FC 9550 F	38,2	44,6	4841
3x120+1x70	FC 12070	47	5430	FC 12070 F	42,4	49	5992
3x150+1x70	FC 15070	51,9	6244	FC 15070 F	47,1	54,1	7166
3x185+1x95	FC 18595	57	7622	FC 18595 F	51,8	59	8612
3x240+1x120	FC 240120	64,8	10032	FC 240120 F	59,2	66,8	11054
3x300+1x150	FC 300150	72,6	12358	FC 300150 F	66,6	74,6	13606
5x1	FC 0510	10,7	154	FC 0510 H	9,7	14,9	387
5x1,5	FC 0515	11,5	189	FC 0515 H	10,5	15,7	437
5x2,5	FC 0525	12,7	245	FC 0525 H	11,7	16,9	518
5x4	FC 0540	15	361	FC 0540 F	14	18,8	633
5x6	FC 0560	16,8	479	FC 0560 F	15,8	20,6	783
5x10	FC 5100	19,6	720	FC 5100 F	18,6	23,4	1075
5x16	FC 5160	24,8	1163	FC 5160 F	21,2	26	1413
5x25	FC 5250	29,1	1697	FC 5250 F	25,5	30,3	1995
5x35	FC 5350	32	2221	FC 5350 F	28,2	33,2	2549
5x50	FC 5500	37,5	3099	FC 5500 F	33,5	38,9	3503
5x70	FC 5700	43,3	4281	FC 5700 F	38,9	45,5	5053
5x95	FC 5950	50,5	5677	FC 5950 F	45,7	52,5	6558
5x120	FC 51200	54,5	7364	FC 51200 F	49,5	56,7	8341
5x150	FC 51500	62,3	8762	FC 51500 F	56,9	64,5	9882
5x185	FC 51850	67,6	10550	FC 51850 F	61,8	69,6	11733
5x240	FC 52400	77,2	13826	FC 52400 F	71	79,4	15216
5x300	FC 53000	86,6	17218	FC 53000 F	80	88,8	18781

Cables are letter coded to the type of protection they include. Here, F = double zinc-plated steel tape spiral wrap. H = zinc-plated steel wire serve.