

Xtra Compact (XCP-S)

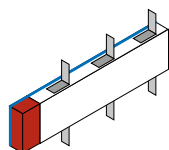
straight elements



64280130P

Straight elements for distribution

Item		In (A)	N° outlets	A (mm)
Al	Cu			
*64280130P	-	630	3+3 **	3000
*64280131P	*67280130P	800		
64280132P	*67280131P	1000		
64280134P	67280133P	1250		
64280136P	67280135P	1600		
64280137P	67280136P	2000		
64390134P	67390134P	2500		
64390136P	67390135P	3200		
64390137P	67390136P	4000		
64390138P	67390138P	5000		
-	67390139P	6300		
*64280970P	-	630	1+1	1001-1500
*64280971P	*67280970P	800		
64280972P	*67280971P	1000		
64280974P	67280973P	1250		
64280976P	67280975P	1600		
64280977P	67280976P	2000		
64390974P	67390974P	2500		
64390976P	67390975P	3200		
64390977P	67390976P	4000		
64390978P	67390978P	5000		
-	67390979P	6300	at request: outlets in special position 1+1 only combination	
*64280920P	-	630	2+2 **	1501-2000
*64280921P	*67280920P	800		
64280922P	*67280921P	1000		
64280924P	67280923P	1250		
64280926P	67280925P	1600		
64280927P	67280926P	2000		
64390924P	67390924P	2500		
64390926P	67390925P	3200		
64390927P	67390926P	4000		
64390928P	67390928P	5000		
-	67390929P	6300		
*64280980P	-	630	2+2 **	2001-2500
*64280981P	*67280980P	800		
64280982P	*67280981P	1000		
64280984P	67280983P	1250		
64280986P	67280985P	1600		
64280987P	67280986P	2000		
64390984P	67390984P	2500		
64390986P	67390985P	3200		
64390987P	67390986P	4000		
64390988P	67390988P	5000		
-	67390989P	6300		
*64280950P	-	630	3+3 **	2501-2999
*64280951P	*67280950P	800		
64280952P	*67280951P	1000		
64280954P	67280953P	1250		
64280956P	67280955P	1600		
64280957P	67280956P	2000		
64390954P	67390954P	2500		
64390956P	67390955P	3200		
64390957P	67390956P	4000		
64390958P	67390958P	5000		
-	67390959P	6300		



Dimensions

Straight elements for distribution

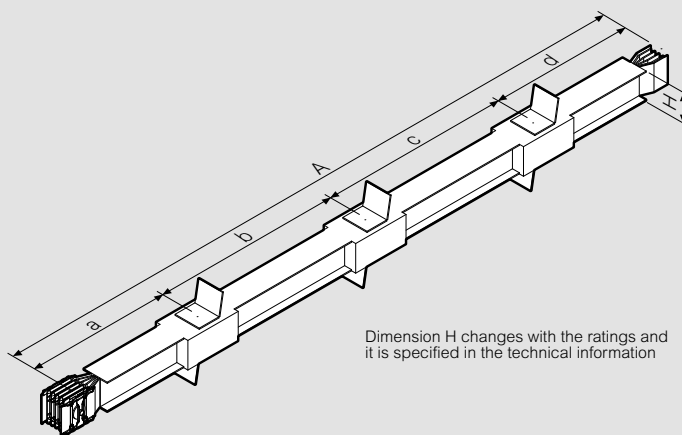
- Straight elements for plug-in type tap-off boxes
- Standard 3000 mm
- Tap-off outlets on both sides

These straight elements enable the application of plug-in boxes on dedicated outlets

Available in lengths from 1 to 3 meters, these elements have respectively 1, 2 and 3 outlets at preset distances with centre distances of 850 mm on both sides.

(*) The exception to these are 630-800 A elements with aluminium conductors (Al) and 800-1000 A elements with copper conductors (Cu), where distributions are only available on the top side (in standard execution) for example "3+0"

On request, the length of the elements and the number and position of distribution outlets may be different from the standards measures.



Dimension H changes with the ratings and it is specified in the technical information

MIN AND MAX DIMENSIONS OF SINGLE AND DOUBLE BAR

Aluminium (Al)	630A – 5000A
Copper (Cu)	800A – 6300A
(L) min/MAX [mm]	1001 ***/3000

(***) Lengths from 1001 mm to 1250 mm can only be installed with type 1 and 3 plug-in boxes.

From 1250 mm to 3000 mm it is possible to install all types of plug-in boxes. Compatible boxes are listed in dedicated chapter. See page 96.

(**) on request it is possible to have other combinations of outlets:

- length: 1501÷2000 - outlets: (1+1)
- length: 2001÷2500 - outlets: (1+1)
- length: 2501÷2999 - outlets: (1+1) and (2+2)
- length: 3000 - outlets: (1+1) and (2+2)

Possibility to have outlets in special position

For a correct evaluation of the number of outlets, take into account the length of the element and the size of the boxes to be installed.

Xtra Compact (XCP-S)

technical data (continued)

XCP-S CU (5 Conductors - clean earth)

3P+N+PE+FE		SINGLE BAR					DOUBLE BAR				TRIPLE BAR
Rated current	In [A]	800	1000	1250	1600	2000	2500	3200	4000	5000	6300
Overall dimension of the busbars	L x H [mm]	120 x 130	120 x 130	120 x 130	120 x 170	120 x 200	120 x 300	120 x 380	120 x 440	120 x 480	120 x 590
Rated operational voltage	Ue [V]	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Rated insulation voltage	Ui [V]	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Frequency	f [Hz]	50	50	50	50	50	50	50	50	50	50
Rated short-time current (1 s)	I _{cw} [kA] _{rms}	25	36	42	42	50	65	80	100	120	150
Peak current	I _{pk} [kA]	53	76	88	88	105	143	176	220	264	330
Allowable specific energy for three-phase fault	I ² t [MA ² s]	625	1296	1764	1764	2500	4225	6400	10000	14400	22500
Rated short-time current of the neutral bar (1 s)	I _{cn} [kA] _{rms}	15	22	25	25	30	39	48	60	72	90
Peak current of the neutral bar	I _{pn} [kA]	30	46	53	53	63	82	101	132	158	198
Rated short-time current of the protective circuit (1 s)	I _{cn} [kA] _{rms}	15	22	25	25	30	39	48	60	72	90
Peak current of the protective circuit	I _{pn} [kA]	30	46	53	53	63	82	101	132	158	198
Phase resistance at 20°C	R ₂₀ [mΩ/m]	0,077	0,058	0,045	0,034	0,024	0,021	0,017	0,012	0,008	0,0062
Phase reactance (50hz)	X [mΩ/m]	0,023	0,017	0,017	0,015	0,014	0,011	0,007	0,006	0,006	0,0050
Phase impedance	Z [mΩ/m]	0,080	0,061	0,048	0,037	0,028	0,024	0,018	0,014	0,010	0,0079
Phase resistance at thermal conditions	R [mΩ/m]	0,100	0,081	0,061	0,045	0,034	0,029	0,024	0,017	0,011	0,0085
Phase impedance at thermal conditions	Z [mΩ/m]	0,103	0,082	0,063	0,048	0,036	0,031	0,025	0,018	0,012	0,0099
Neutral resistance	R ₂₀ [mΩ/m]	0,077	0,058	0,045	0,034	0,024	0,021	0,017	0,012	0,008	0,0062
Functional Earth resistance (FE)	R ₂₀ [mΩ/m]	0,077	0,058	0,045	0,034	0,024	0,021	0,017	0,012	0,008	0,0062
Functional Earth reactance (FE)	X [mΩ/m]	0,023	0,017	0,017	0,015	0,014	0,011	0,007	0,006	0,006	0,0050
Resistance of the protective bar (PE 1)	R _{PE} [mΩ/m]	0,133	0,133	0,133	0,120	0,111	0,090	0,079	0,072	0,068	0,0412
Resistance of the protective bar (PE 2)	R _{PE} [mΩ/m]	0,049	0,049	0,049	0,038	0,032	0,025	0,021	0,017	0,016	0,0125
Resistance of the protective bar (PE 3)	R _{PE} [mΩ/m]	0,084	0,084	0,084	0,064	0,054	0,042	0,035	0,029	0,026	0,0213
Reactance of the protective bar	X _{PE} [mΩ/m]	0,054	0,054	0,054	0,044	0,044	0,032	0,022	0,017	0,016	0,0140
Resistance of the fault loop (PE 1)	R _o [mΩ/m]	0,126	0,099	0,078	0,060	0,045	0,038	0,031	0,023	0,015	0,0115
Resistance of the fault loop (PE 2)	R _o [mΩ/m]	0,107	0,085	0,068	0,052	0,038	0,032	0,026	0,019	0,013	0,0103
Resistance of the fault loop (PE 3)	R _o [mΩ/m]	0,117	0,093	0,074	0,056	0,041	0,035	0,028	0,021	0,014	0,0109
Reactance of the fault loop (50hz)	X _o [mΩ/m]	0,077	0,071	0,071	0,059	0,058	0,043	0,029	0,023	0,022	0,0190
Impedance of the fault loop (PE 1)	Z _o [mΩ/m]	0,147	0,122	0,106	0,084	0,073	0,058	0,042	0,032	0,026	0,0222
Impedance of the fault loop (PE 2)	Z _o [mΩ/m]	0,132	0,111	0,098	0,079	0,070	0,054	0,039	0,030	0,025	0,0216
Impedance of the fault loop (PE 3)	Z _o [mΩ/m]	0,140	0,117	0,102	0,081	0,071	0,056	0,041	0,031	0,026	0,0219
Zero-sequence short-circuit average resistance phase - N	R _o [mΩ/m]	0,103	0,078	0,060	0,045	0,033	0,028	0,023	0,016	0,010	0,0082
Zero-sequence short-circuit average reactance phase - N	X _o [mΩ/m]	0,031	0,023	0,023	0,020	0,019	0,015	0,009	0,008	0,008	0,0067
Zero-sequence short-circuit average impedance phase - N	Z _o [mΩ/m]	0,107	0,081	0,064	0,050	0,038	0,032	0,025	0,018	0,013	0,0106
Zero-sequence short-circuit average resistance phase - PE	R _o [mΩ/m]	0,103	0,078	0,060	0,045	0,033	0,028	0,023	0,016	0,010	0,0082
Zero-sequence short-circuit average reactance phase - PE	X _o [mΩ/m]	0,031	0,023	0,023	0,020	0,019	0,015	0,009	0,008	0,008	0,0067
Zero-sequence short-circuit average impedance phase - PE	Z _o [mΩ/m]	0,107	0,081	0,064	0,050	0,038	0,032	0,025	0,018	0,013	0,0106
Voltage drop with distributed load ΔV [V/(m ² A)]10 ⁻⁶	cosφ = 0,70	75,1	59,5	47,2	36,7	29,0	24,5	19,2	14,1	10,3	8,3
	cosφ = 0,75	78,4	62,2	49,1	37,9	29,9	25,3	19,9	14,6	10,5	8,4
	cosφ = 0,80	81,5	64,8	50,8	39,1	30,6	25,9	20,6	15,0	10,7	8,5
	cosφ = 0,85	84,4	67,2	52,3	40,1	31,1	26,5	21,2	15,4	10,7	8,6
	cosφ = 0,90	86,9	69,3	53,6	40,9	31,5	26,9	21,7	15,6	10,7	8,5
	cosφ = 0,95	88,8	71,0	54,4	41,2	31,4	27,0	22,0	15,7	10,6	8,4
cosφ = 1,00	86,9	69,9	52,4	39,1	29,1	25,3	21,2	14,8	9,4	7,4	
Weight (PE 1)	p [kg/m]	23,7	27,1	31,0	38,9	49,9	59,9	74,1	96,0	138,1	193,1
Weight (PE 2)	p [kg/m]	27,1	30,4	34,4	43,3	55,1	66,5	82,1	105,5	148,6	206,2
Weight (PE 3)	p [kg/m]	24,8	28,1	32,1	40,3	51,6	62,0	76,7	99,1	141,6	197,4
Fire load	[kWh/m]	5,6	6,9	6,9	10,0	10,3	13,1	20,0	23,8	26,3	27,3
Degree of protection	IP	55/65*	55/65*	55/65*	55/65*	55/65*	55/65*	55/65*	55/65*	55/65*	55/65*
Insulation material thermal resistance class		B/F**	B/F**	B/F**	B/F**	B/F**	B/F**	B/F**	B/F**	B/F**	B/F**
Losses for the Joule effect at nominal current	P [W/m]	193	242	284	347	403	547	752	823	816	1015
Ambient temperature min/ MAX (daily average)	[°C]	-5/+50	-5/+50	-5/+50	-5/+50	-5/+50	-5/+50	-5/+50	-5/+50	-5/+50	-5/+50

* IP65 for feeder lines is available by request
 ** Class F available under request

For temperatures over 35°C it will be necessary to derate the busbar and for ambient temperatures under -5°C contact the technical support.

The data on this page refer to the 50 Hz frequency. For 60 Hz, please contact Legrand.



PE 1
Standard version



PE 2
Extra earth - COPPER XCP Cu 3L+N+50%PE
(tinned copper conductors available on request)



PE 3
Extra earth - ALUMINUM