Xtra Compact (XCP-S)

straight elements

64280130P

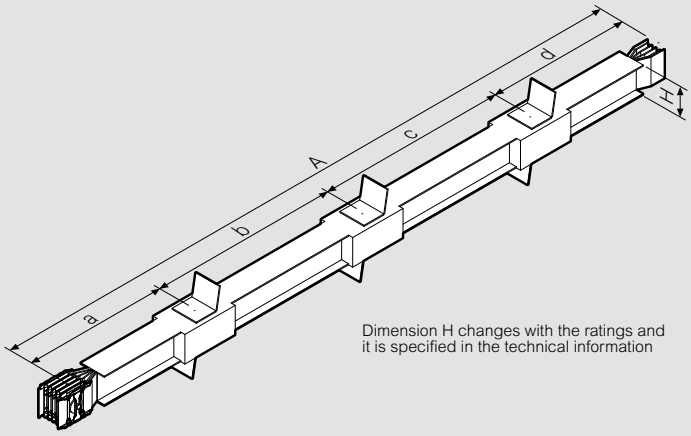
Item		Straight elements for distribution		
Al	Cu	In (A)	N° outlets	A (mm)
*64280130P	-	630	3+3 **	3000
*64280131P	*67280130P	800		
64280132P	*67280131P	1000		
64280134P	67280133P	1250		
64280136P	67280135P	1600		
64280137P	67280136P	2000		
64390134P	67390134P	2500		
64390136P	67390135P	3200		
64390137P	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		at request: outlets in special position 1+1 only combination
-	67390979P	6300		
*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

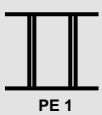
XCP-S Al (5 Conductors - double neutral)

3P+2N+PE		SINGLE BAR						DOUBLE BAR			TRIPLE BAR
Rated current	**In [A]**	**630**	**800**	**1000**	**1250**	**1600**	**2000**	**2500**	**3200**	**4000**	**5000**
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 220	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***	25***	36	42	42	50	65	80	100	120
Peak current	I_{pk} [kA]	53	53	76	88	88	105	143	176	220	264
Allowable specific energy for three-phase fault	I^2t [MA^{2}s]	312	312	1296	1764	1764	2500	4225	6400	10000	14400
Rated short-time current of the neutral bar (1 s)	I_{CW} [kA]$_{rms}$	15***	15***	22	25	25	30	39	48	60	72
Peak current of the neutral bar	I_{pk} [kA]	30	30	46	53	53	63	82	101	132	158
Rated short-time current of the protective circuit (1 s)	I_{CW} [kA]$_{rms}$	15***	15***	22	25	25	30	39	48	60	72
Peak current of the protective circuit	I_{pk} [kA]	30	30	46	53	53	63	82	101	132	158
Phase resistance at 20°C	R_{20} [mΩ/m]	0,140	0,092	0,077	0,057	0,041	0,029	0,029	0,021	0,014	0,011
Phase reactance (50hz)	X [mΩ/m]	0,023	0,017	0,017	0,016	0,015	0,014	0,011	0,007	0,006	0,005
Phase impedance	Z [mΩ/m]	0,142	0,094	0,079	0,060	0,044	0,032	0,031	0,022	0,016	0,012
Phase resistance at thermal conditions	R [mΩ/m]	0,185	0,122	0,104	0,080	0,058	0,040	0,041	0,030	0,021	0,015
Phase impedance at thermal conditions	Z [mΩ/m]	0,186	0,123	0,105	0,081	0,059	0,043	0,042	0,031	0,022	0,016
Neutral resistance	R_{20} [mΩ/m]	0,070	0,046	0,038	0,029	0,021	0,014	0,014	0,010	0,007	0,005
Resistance of the protective bar (PE 1)	R_{PE} [mΩ/m]	0,132	0,132	0,132	0,119	0,110	0,106	0,078	0,071	0,067	0,040
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	0,013
Resistance of the protective bar (PE 3)	R_{PE} [mΩ/m]	0,084	0,084	0,084	0,064	0,054	0,049	0,035	0,029	0,026	0,021
Reactance of the protective bar	X_{PE} [mΩ/m]	0,080	0,078	0,078	0,048	0,039	0,028	0,020	0,015	0,016	0,014
Resistance of the fault loop (PE 1)	R_o [mΩ/m]	0,272	0,224	0,208	0,176	0,152	0,135	0,107	0,092	0,082	0,051
Resistance of the fault loop (PE 2)	R_o [mΩ/m]	0,190	0,142	0,126	0,095	0,073	0,054	0,049	0,038	0,030	0,023
Resistance of the fault loop (PE 3)	R_o [mΩ/m]	0,224	0,176	0,161	0,121	0,096	0,078	0,064	0,050	0,040	0,032
Reactance of the fault loop (50hz)	X_o [mΩ/m]	0,10	0,10	0,10	0,06	0,05	0,04	0,03	0,02	0,02	0,02
Impedance of the fault loop (PE 1)	Z_o [mΩ/m]	0,291	0,243	0,229	0,188	0,161	0,142	0,111	0,094	0,085	0,054
Impedance of the fault loop (PE 2)	Z_o [mΩ/m]	0,216	0,171	0,158	0,115	0,091	0,069	0,058	0,044	0,037	0,030
Impedance of the fault loop (PE 3)	Z_o [mΩ/m]	0,247	0,200	0,187	0,137	0,110	0,089	0,071	0,054	0,046	0,037
Zero-sequence short-circuit average resistance phase - N	R_o [mΩ/m]	0,117	0,077	0,064	0,048	0,034	0,024	0,024	0,017	0,012	0,009
Zero-sequence short-circuit average reactance phase - N	X_o [mΩ/m]	0,019	0,014	0,014	0,013	0,013	0,012	0,009	0,006	0,005	0,004
Zero-sequence short-circuit average impedance phase - N	Z_o [mΩ/m]	0,118	0,078	0,066	0,050	0,037	0,027	0,026	0,018	0,013	0,010
Zero-sequence short-circuit average resistance phase - PE	R_o [mΩ/m]	0,178	0,162	0,157	0,138	0,124	0,116	0,088	0,078	0,072	0,044
Zero-sequence short-circuit average reactance phase - PE	X_o [mΩ/m]	0,031	0,023	0,023	0,021	0,020	0,019	0,015	0,009	0,008	0,007
Zero-sequence short-circuit average impedance phase - PE	Z_o [mΩ/m]	0,181	0,164	0,159	0,140	0,126	0,117	0,089	0,079	0,073	0,044
Voltage drop with distribuited load ΔV [V/(m*A)]10^{-6}	cosφ = 0,70	126,3	84,4	73,4	58,1	44,1	33,2	31,5	22,4	16,3	12,4
	cosφ = 0,75	133,3	88,9	77,1	60,8	45,9	34,3	32,8	23,3	17,0	12,9
	cosφ = 0,80	140,1	93,3	80,7	63,4	47,6	35,3	34,0	24,2	17,6	13,3
	cosφ = 0,85	146,6	97,5	84,1	65,9	49,2	36,1	35,1	25,1	18,1	13,6
	cosφ = 0,90	152,8	101,5	87,3	68,0	50,5	36,8	36,0	25,8	18,5	13,9
	cosφ = 0,95	158,4	104,9	90,0	69,8	51,4	37,0	36,5	26,4	18,8	14,0
	cosφ = 1,00	160,2	105,6	89,9	68,9	49,8	35,0	35,3	25,8	18,0	13,3
Weight (PE 1)	p [kg/m]	15,3	17,0	17,6	20,9	25,2	31,1	38,3	47,1	58,0	98,2
Weight (PE 2)	p [kg/m]	18,6	20,3	20,9	25,3	30,3	37,6	46,3	56,6	68,6	111,3
Weight (PE 3)	p [kg/m]	16,4	18,0	18,7	22,3	26,9	33,0	40,9	50,2	61,5	102,5
Fire load	[kWh/m]	5,6	6,9	6,9	7,5	10,6	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]	220	234	311	373	442	485	765	914	1000	1154
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
*** Icw value at 0,5 s.

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

PE 3
Extra earth - ALUMINUM
XCP Al 3L+N+50%PE
(available on request)