

Xtra Compact (XCP-HP)

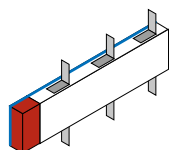
straight elements



63280130P

Straight elements for distribution

Item		In (A)	N° outlets	A (mm)		
Al	Cu					
63280130P	-	630	3+3 **	3000		
63280131P	*66280130P	800				
63280132P	66280131P	1000				
63280134P	66280133P	1250				
63280136P	66280135P	1600				
63280137P	66280136P	2000				
63390134P	66280138P	2500				
63390136P	66390135P	3200				
63390137P	66390136P	4000				
63390138P	66390138P	5000				
-	66390139P	6300				
63280970P	-	630			1+1	1001-1500
63280971P	*66280970P	800				
63280972P	66280971P	1000				
63280974P	66280973P	1250				
63280976P	66280975P	1600				
63280977P	66280976P	2000				
63390974P	66280978P	2500				
63390976P	66390975P	3200				
63390977P	66390976P	4000				
63390978P	66390978P	5000				
-	66390979P	6300				
63280920P	-	630	2+2 **	1501-2000		
63280921P	*66280920P	800				
63280922P	66280921P	1000				
63280924P	66280923P	1250				
63280926P	66280925P	1600				
63280927P	66280926P	2000				
63390924P	66280928P	2500				
63390926P	66390925P	3200				
63390927P	66390926P	4000				
63390928P	66390928P	5000				
-	66390929P	6300				
63280980P	-	630			2+2 **	2001-2500
63280981P	*66280980P	800				
63280982P	66280981P	1000				
63280984P	66280983P	1250				
63280986P	66280985P	1600				
63280987P	66280986P	2000				
63390984P	66280988P	2500				
63390986P	66390985P	3200				
63390987P	66390986P	4000				
63390988P	66390988P	5000				
-	66390989P	6300				
63280950P	-	630	3+3 **	2501-2999		
63280951P	*66280950P	800				
63280952P	66280951P	1000				
63280954P	66280953P	1250				
63280956P	66280955P	1600				
63280957P	66280956P	2000				
63390954P	66280958P	2500				
63390956P	66390955P	3200				
63390957P	66390956P	4000				
63390958P	66390958P	5000				
-	66390959P	6300				



Dimensions

Straight elements for distribution

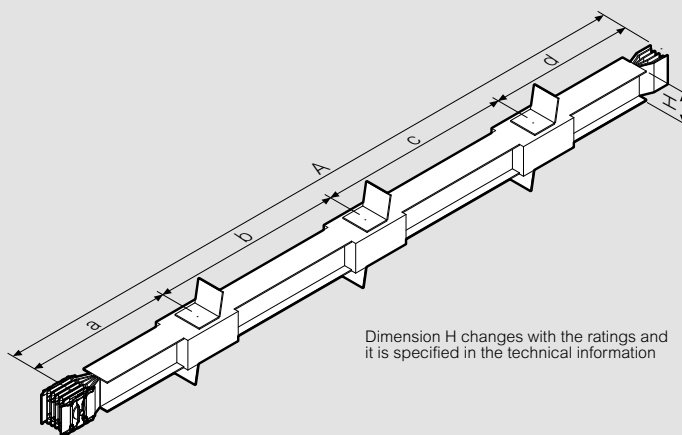
- Straight elements for plug-in type tap-off boxes
- Standard 3000 mm
- Tap-off outlets on both sides

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 distribution is 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

Xtra Compact (XCP-HP)

technical data

XCP-HP AI (5 Conductors - clean earth)

3P+N+PE+FE	SINGLE BAR	SINGLE BAR					DOUBLE BAR				TRIPLE BAR
		630	800	1000	1250	1600	2000	2500	3200	4000	5000
Rated current	In [A]	630	800	1000	1250	1600	2000	2500	3200	4000	5000
Overall dimension of the busbars	L x H [mm]	125 x 130	125 x 130	125 x 130	125 x 130	125 x 200	125 x 220	125 x 380	125 x 440	125 x 480	125 x 740
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)	Icw [kA] _{rms}	36	36	50	70	70	85	120	120	150	150
Peak current	Ipk [kA]	76	76	105	154	154	187	264	264	330	330
Allowable specific energy for three-phase fault	I²t [MA²s]	1296	1296	2500	4900	4900	7225	14400	14400	22500	22500
Rated short-time current of the neutral bar (1 s)	Icw [kA] _{rms}	22	22	30	42	42	51	72	72	90	90
Peak current of the neutral bar	Ipk [kA]	45	45	63	88	88	112	158	158	198	198
Rated short-time current of the protective circuit (1 s)	Icw [kA] _{rms}	22	22	30	42	42	51	72	72	90	90
Peak current of the protective circuit	Ipk [kA]	45	45	63	88	88	112	158	158	198	198
Phase resistance at 20°C	R20 [mΩ/m]	0,077	0,077	0,056	0,045	0,031	0,025	0,022	0,015	0,012	0,010
Phase reactance (50hz)	X [mΩ/m]	0,023	0,017	0,017	0,015	0,014	0,011	0,006	0,006	0,006	0,005
Phase impedance	Z [mΩ/m]	0,080	0,079	0,059	0,047	0,034	0,027	0,023	0,017	0,014	0,011
Phase resistance at thermal conditions	R [mΩ/m]	0,101	0,102	0,076	0,062	0,043	0,035	0,032	0,022	0,018	0,014
Phase impedance at thermal conditions	Z [mΩ/m]	0,104	0,103	0,078	0,064	0,045	0,037	0,032	0,023	0,019	0,015
Neutral resistance	R20 [mΩ/m]	0,077	0,077	0,056	0,045	0,031	0,025	0,022	0,015	0,012	0,010
Functional Earth resistance (FE)	R20 [mΩ/m]	0,077	0,077	0,056	0,045	0,031	0,025	0,022	0,015	0,012	0,010
Functional Earth reactance (FE)	X [mΩ/m]	0,023	0,017	0,017	0,015	0,014	0,011	0,006	0,006	0,006	0,005
Resistance of the protective bar (PE 1)	RPE [mΩ/m]	0,133	0,133	0,266	0,266	0,222	0,213	0,156	0,143	0,136	0,035
Resistance of the protective bar (PE 2)	RPE [mΩ/m]	0,049	0,049	0,049	0,049	0,032	0,029	0,019	0,016	0,014	0,010
Resistance of the protective bar (PE 3)	RPE [mΩ/m]	0,084	0,084	0,084	0,084	0,054	0,049	0,032	0,027	0,025	0,016
Reactance of the protective bar	XPE [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)	Ro [mΩ/m]	0,125	0,125	0,102	0,083	0,058	0,047	0,042	0,029	0,024	0,017
Resistance of the fault loop (PE 2)	Ro [mΩ/m]	0,107	0,107	0,082	0,069	0,047	0,038	0,033	0,023	0,019	0,014
Resistance of the fault loop (PE 3)	Ro [mΩ/m]	0,117	0,117	0,090	0,074	0,051	0,042	0,036	0,025	0,021	0,016
Reactance of the fault loop (50hz)	Xo [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)	Zo [mΩ/m]	0,162	0,157	0,140	0,105	0,079	0,061	0,049	0,036	0,032	0,026
Impedance of the fault loop (PE 2)	Zo [mΩ/m]	0,148	0,143	0,126	0,093	0,071	0,055	0,042	0,031	0,029	0,024
Impedance of the fault loop (PE 3)	Zo [mΩ/m]	0,156	0,151	0,131	0,097	0,073	0,057	0,044	0,033	0,030	0,025
Zero-sequence short-circuit average resistance phase - N	Ro [mΩ/m]	0,102	0,102	0,075	0,060	0,041	0,033	0,030	0,021	0,017	0,013
Zero-sequence short-circuit average reactance phase - N	Xo [mΩ/m]	0,031	0,023	0,023	0,020	0,019	0,015	0,008	0,008	0,008	0,007
Zero-sequence short-circuit average impedance phase - N	Zo [mΩ/m]	0,107	0,105	0,078	0,063	0,045	0,036	0,031	0,022	0,018	0,014
Zero-sequence short-circuit average resistance phase - PE	Ro [mΩ/m]	0,102	0,102	0,075	0,060	0,041	0,033	0,030	0,021	0,017	0,013
Zero-sequence short-circuit average reactance phase - PE	Xo [mΩ/m]	0,031	0,023	0,023	0,020	0,019	0,015	0,008	0,008	0,008	0,007
Zero-sequence short-circuit average impedance phase - PE	Zo [mΩ/m]	0,107	0,105	0,078	0,063	0,045	0,036	0,031	0,022	0,018	0,014
Voltage drop with distributed load ΔV [V/(m*A)]10 ⁻⁶	cosφ = 0,70	75,6	72,1	56,5	47,0	34,7	27,9	23,0	17,2	14,6	11,5
	cosφ = 0,75	79,0	75,7	59,0	49,0	36,0	28,9	24,1	17,9	15,1	11,9
	cosφ = 0,80	82,1	79,2	61,3	50,9	37,1	29,9	25,1	18,5	15,6	12,2
	cosφ = 0,85	85,1	82,6	63,5	52,7	38,1	30,7	26,1	19,1	16,0	12,5
	cosφ = 0,90	87,7	85,6	65,5	54,2	38,8	31,3	27,0	19,6	16,3	12,7
	cosφ = 0,95	89,6	88,2	66,9	55,3	39,2	31,7	27,8	19,9	16,4	12,8
cosφ = 1,00	87,7	88,0	65,6	53,9	37,3	30,2	27,5	19,3	15,6	12,0	
Weight (PE 1)	p [kg/m]	17,5	17,5	19,7	21,7	28,8	33,6	42,8	54,4	62,9	102,2
Weight (PE 2)	p [kg/m]	20,8	20,8	23,0	25,0	34,0	39,3	51,5	64,7	74,2	119,2
Weight (PE 3)	p [kg/m]	21,0	18,6	20,8	22,7	30,5	35,5	45,6	57,7	66,6	107,8
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]	121	195	227	292	330	418	596	683	863	1042
Ambient temperature min/ MAX (daily average)	[°C]	-5/+70	-5/+70	-5/+70	-5/+70	-5/+70	-5/+70	-5/+70	-5/+70	-5/+70	-5/+70

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

For temperatures over 50°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.

