

Xtra Compact (XCP-HP)

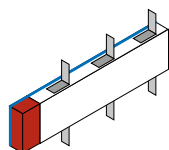
straight elements



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

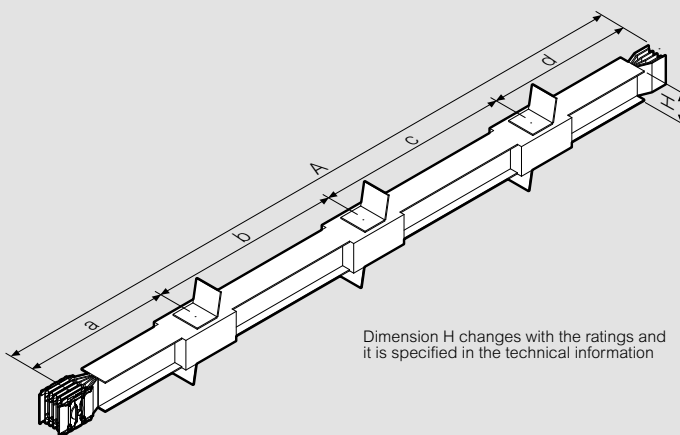
- Straight elements for plug-in type tap-off boxes
- Standard 3000 mm
- Tap-off outlets on both sides

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 (continued)

XCP-HP CU (5 Conductors - clean earth)

3P+N+PE+FE		SINGLE BAR						DOUBLE BAR			TRIPLE BAR
		800	1000	1250	1600	2000	2500	3200	4000	5000	6300
Rated current	In [A]										
Overall dimension of the busbars	L x H [mm]	125 x 130	125 x 130	125 x 130	125 x 170	125 x 170	125 x 220	125 x 380	125 x 440	125 x 480	125 x 680
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}	36	50	70	70	85	120	120	150	150	150
Peak current	I _{pk} [kA]	76	105	154	154	187	264	264	330	330	330
Allowable specific energy for three-phase fault	I ² t [MA ² s]	1296	2500	4900	4900	7225	14400	14400	22500	22500	22500
Rated short-time current of the neutral bar (1 s)	I _{cn} [kA] _{rms}	22	30	42	42	51	72	72	90	90	90
Peak current of the neutral bar	I _{pn} [kA]	45	63	88	88	112	158	158	198	198	198
Rated short-time current of the protective circuit (1 s)	I _{cn} [kA] _{rms}	22	30	42	42	51	72	72	90	90	90
Peak current of the protective circuit	I _{pn} [kA]	45	63	88	88	112	158	158	198	198	198
Phase resistance at 20°C	R ₂₀ [mΩ/m]	0,077	0,045	0,038	0,034	0,018	0,015	0,013	0,009	0,006	0,006
Phase reactance (50hz)	X [mΩ/m]	0,023	0,017	0,017	0,015	0,014	0,011	0,007	0,006	0,006	0,004
Phase impedance	Z [mΩ/m]	0,080	0,048	0,042	0,037	0,023	0,018	0,015	0,011	0,009	0,007
Phase resistance at thermal conditions	R [mΩ/m]	0,100	0,055	0,048	0,044	0,024	0,019	0,017	0,012	0,009	0,008
Phase impedance at thermal conditions	Z [mΩ/m]	0,103	0,058	0,051	0,047	0,028	0,022	0,019	0,014	0,011	0,009
Neutral resistance	R ₂₀ [mΩ/m]	0,077	0,045	0,038	0,034	0,018	0,015	0,013	0,009	0,006	0,006
Functional Earth resistance (FE)	R ₂₀ [mΩ/m]	0,077	0,045	0,038	0,034	0,018	0,015	0,013	0,009	0,006	0,006
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	0,004
Resistance of the protective bar (PE 1)	R _{PE} [mΩ/m]	0,132	0,132	0,132	0,119	0,122	0,108	0,078	0,072	0,068	0,037
Resistance of the protective bar (PE 2)	R _{PE} [mΩ/m]	0,049	0,049	0,049	0,038	0,038	0,014	0,019	0,016	0,014	0,011
Resistance of the protective bar (PE 3)	R _{PE} [mΩ/m]	0,084	0,084	0,084	0,064	0,064	0,025	0,032	0,025	0,023	0,021
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	0,014
Resistance of the fault loop (PE 1)	R _o [mΩ/m]	0,126	0,078	0,067	0,060	0,035	0,028	0,024	0,018	0,012	0,011
Resistance of the fault loop (PE 2)	R _o [mΩ/m]	0,107	0,068	0,059	0,052	0,031	0,022	0,021	0,015	0,011	0,009
Resistance of the fault loop (PE 3)	R _o [mΩ/m]	0,12	0,07	0,06	0,06	0,03	0,02	0,02	0,02	0,01	0,01
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	0,018
Impedance of the fault loop (PE 1)	Z _o [mΩ/m]	0,147	0,106	0,098	0,084	0,067	0,051	0,038	0,029	0,025	0,021
Impedance of the fault loop (PE 2)	Z _o [mΩ/m]	0,132	0,098	0,093	0,079	0,066	0,048	0,036	0,028	0,025	0,020
Impedance of the fault loop (PE 3)	Z _o [mΩ/m]	0,140	0,102	0,096	0,081	0,067	0,049	0,037	0,028	0,025	0,021
Zero-sequence short-circuit average resistance phase - N	R _o [mΩ/m]	0,103	0,060	0,050	0,045	0,025	0,020	0,018	0,012	0,009	0,008
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	0,005
Zero-sequence short-circuit average impedance phase - N	Z _o [mΩ/m]	0,107	0,064	0,055	0,050	0,031	0,025	0,020	0,015	0,012	0,009
Zero-sequence short-circuit average resistance phase - PE	R _o [mΩ/m]	0,103	0,060	0,050	0,045	0,025	0,020	0,018	0,012	0,009	0,008
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	0,005
Zero-sequence short-circuit average impedance phase - PE	Z _o [mΩ/m]	0,107	0,064	0,055	0,050	0,031	0,025	0,020	0,015	0,012	0,009
Voltage drop with distributed load ΔV [V/(m ² A)]10 ⁻⁶	cosφ = 0,70	74,9	43,9	39,4	36,1	23,3	18,5	14,8	11,1	9,0	7,1
	cosφ = 0,75	78,2	45,5	40,7	37,3	23,7	18,8	15,2	11,4	9,1	7,2
	cosφ = 0,80	81,3	47,0	41,9	38,4	24,0	19,0	15,6	11,6	9,1	7,3
	cosφ = 0,85	84,1	48,3	42,9	39,4	24,1	19,2	15,9	11,8	9,1	7,4
	cosφ = 0,90	86,7	49,3	43,6	40,1	24,1	19,1	16,1	11,8	9,0	7,4
	cosφ = 0,95	88,5	49,9	43,9	40,4	23,6	18,8	16,1	11,7	8,7	7,3
cosφ = 1,00	86,7	47,7	41,3	38,3	20,9	16,6	14,9	10,6	7,5	6,6	
Weight (PE 1)	p [kg/m]	23,8	31,1	34,5	39,0	59,9	74,3	88,2	117,3	157,4	200,3
Weight (PE 2)	p [kg/m]	27,2	34,5	37,8	43,4	64,3	85,6	96,9	127,6	168,8	215,7
Weight (PE 3)	p [kg/m]	24,9	32,2	35,5	40,4	61,3	78,0	91,1	120,8	161,4	204,5
Fire load	[kWh/m]	5,625	6,875	6,875	10	10,25	13,125	20	23,75	26,25	27,25
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]	192	165	224	339	289	360	529	588	648	901
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 55°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