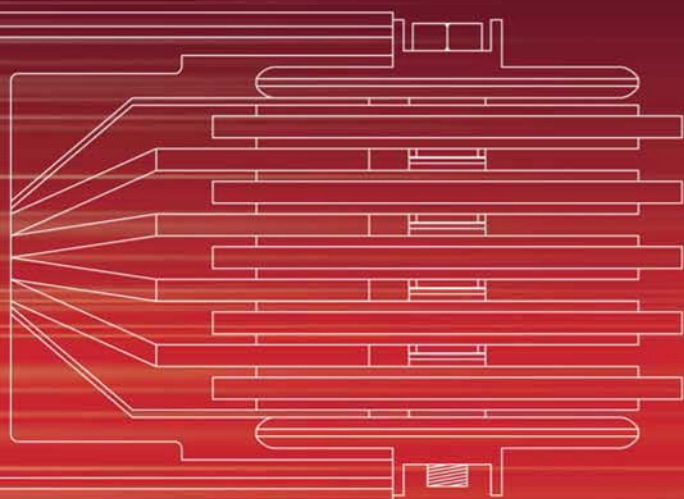


BUSBAR TRUNKING SYSTEM
BUSWAY
600A ÷ 4000A

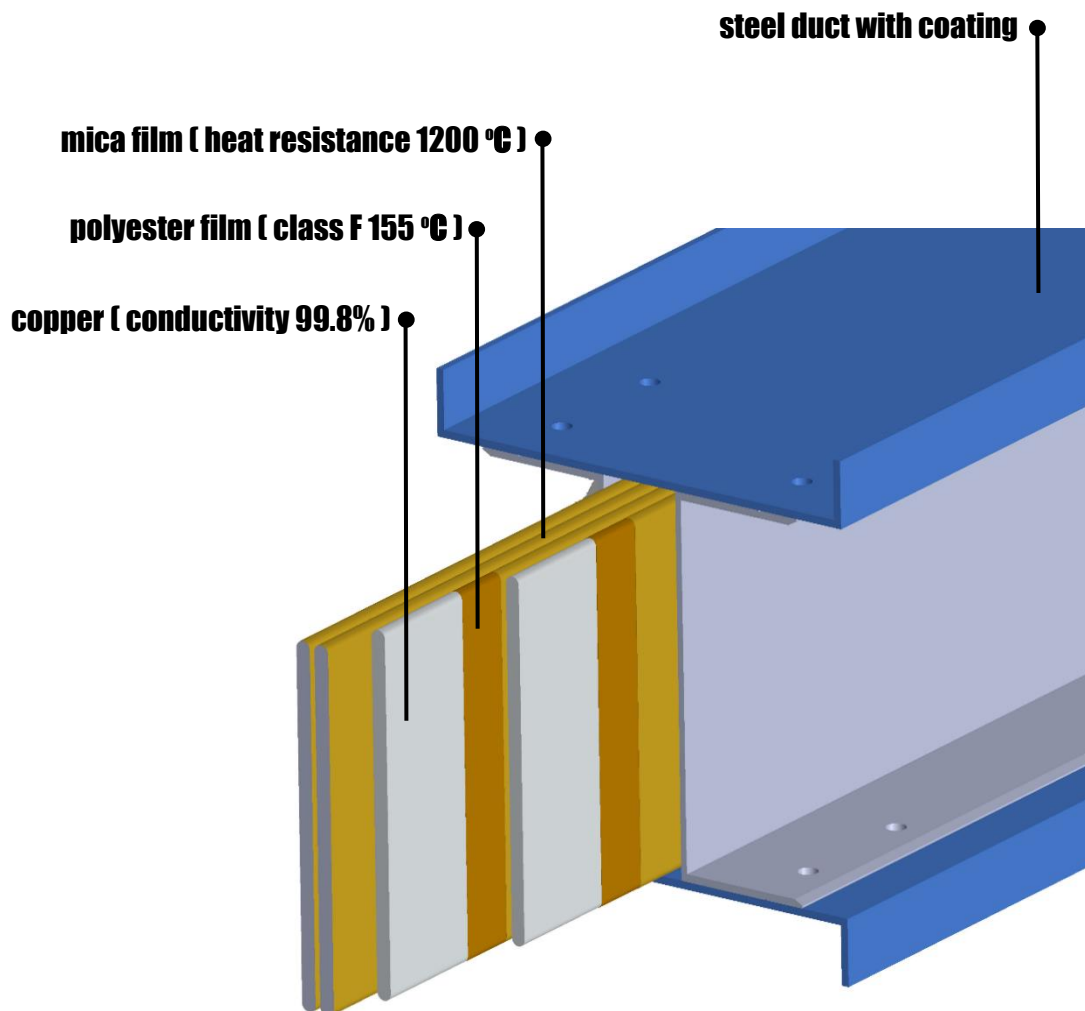


POWERFLOW Series
FR

COMPAC
ELECTRIC

FIRE - RESISTANT

1

**1**

Wide availability from 600A to 4000A feeder, larger rating or special construction are also available on request.

2

1200°C rated heat resistant mica film protected, test in accordance with following standards:

3

**CNS14286 : 840°C/30 minutes
IEC60331 : 750°C/3 hours
BS6387 : 950°C/3 hours
Voltage : 2.5KV 5 minutes.**

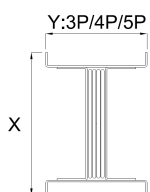
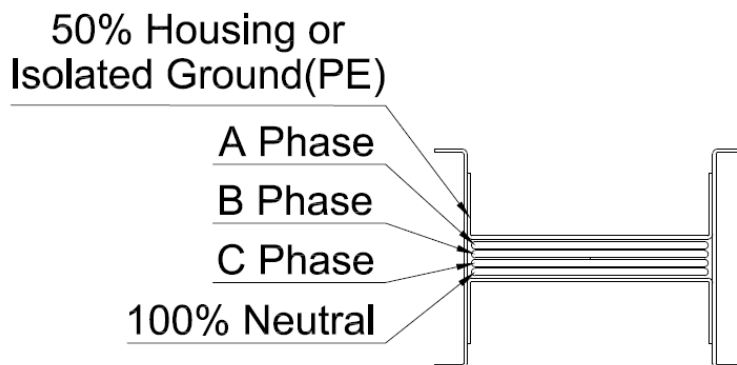
FEATURES & ADVANTAGE OF FIRE - RESISTANT BUSBAR TRUNKING SYSTEM

2

- COMPLIES TO INTERNATIONAL STANDARDS:
 - CNS14286, IEC60331, BS6387
- RATED CURRENT FROM 600A UP TO 4000A, OPERATION VOLTAGE 1000V
 - **TYPE:** AVAILABLE VERSIONS:
 - 3 POLES (3 CONDUCTORS)
 - A:** 3P+PE (WITH PE 50%UP OF PHASE FROM ENCLOSURE)
 - 4 POLES (4 CONDUCTORS)
 - B:** 3P+FE+PE (FE AS 100% OF PHASE FOR EARTH BAR, WITH PE 50%UP OF PHASE FROM ENCLOSURE)
 - C:** 3P+N+PE (WITH PE 50%UP OF PHASE FROM ENCLOSURE)
 - 5 POLES (5 CONDUCTORS)
 - D:** 3P+2N+PE (WITH PE 50%UP OF PHASE FROM ENCLOSURE)
 - E:** 3P+N+FE+PE (FE AS100% OF PHASE FOR EARTH BAR, WITH PE 50%UP OF PHASE FROM ENCLOSURE)
 - Note: PE can be functioned "G" as Grounding or "E" as Earth bar which is provided BBT's Enclosure per application.**
- STEEL ENCLOSURE — PROVIDES MECHANICAL STRENGTH. IT BRINGS MORE THAN 50% OF THE PHASE FROM PROTECTION CONDUCTOR (PE).
- VERY GOOD HEAT DISSIPATION, COMPACT SIZE, HIGH SHORT-CIRCUIT STRENGTH, LOW IMPEDANCE, LOW VOLTAGE DROP AND GOOD CORROSION STRENGTH.
- IP 40/43/55/65/67 PROECTION DEGREE(EN60529) ARE AVAILABLE.
- VOLTAGE UP TO 1000V AT FREQUENCY OF 50/60HZ.
- ALL CONDUCTORS ARE COMPLETELY WRAPPED WITH CLASS F 155°C INSULATION MATERIAL AND MICA FILM (HEAT RESISTANCE 1200°C).
- RAL 7037 FOR STANDARD PAINTED VERSION (SPECIAL COLOR IS AVAILABLE BY CUSTOMER REQUEST).

FEATURES & ADVANTAGE OF FIRE - RESISTANT BUSBAR TRUNKING SYSTEM

- CONDUCTORS:
 - PURE ELECTROLYTIC COPPER WITH 99.8%UP PURITY AND 100% IACS. CAN BE TIN-PLATED OR SILVER-PLATED(OPTIONAL)
 - HIGHT CONDUCTIVITY COPPER BUSBAR.
- EASY INSTALLATION WITH SINGLE-BOLT JOINT.
- BBT ARE ASSEMBLED SANDWICH TYPE.
- WITH STRAIGHT PLUG-IN LENGTH VERSION THE THREE METERS SECTIONS COME WITH 6 TAP-OFF OUTLETS.
- TAP-OFF BOXES WITH SWITCH, FUSES OR MCCB's.
- LOW JOULE LOSSES WHICH CONTRIBUTES TO ENERGY SAVINGS.(REFER TO TECHNICAL DATA)



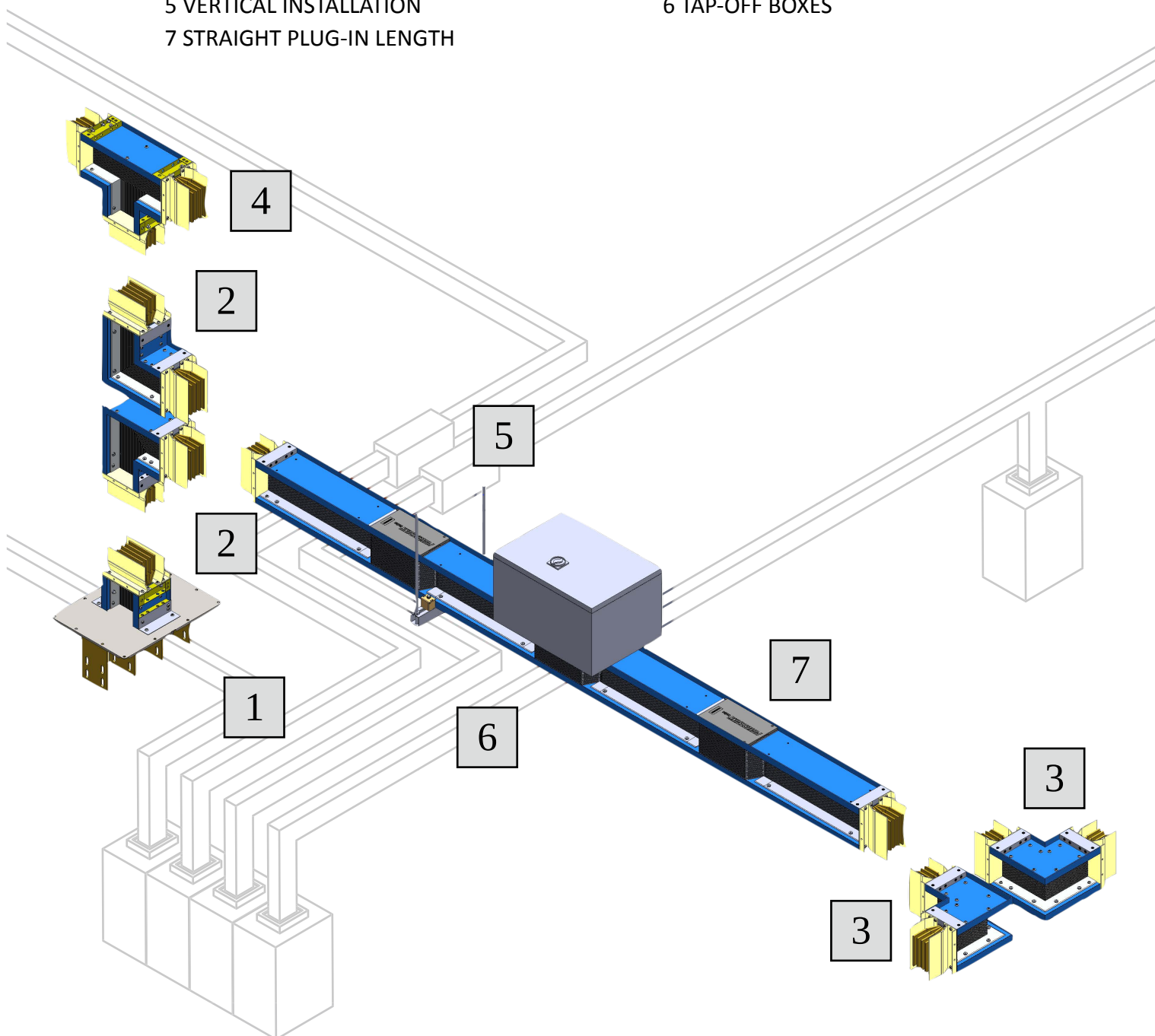
FIRE - RESISTANT BUSWAY DIMENSIONS(CU)

Rating(A)		600	800	1000	1250	1600	2000	2500	3200	4000
Dimensions (mm)	x	90	100	113	130	170	210	250	346	426
	y	148								

FOR A SAMPLE OF BUSBAR TRUNKING SYSTEM CONBINATION AS BELOW, CUSTOMER MAY FOLLOW THIS PROCEDURE PER OUR RECOMMENDATION.

- 1 TERMINAL UNIT
- 3 EDGEWISE ELBOW
- 5 VERTICAL INSTALLATION
- 7 STRAIGHT PLUG-IN LENGTH

- 2 FLATWISE ELBOW
- 4 FLATWISE TEE ELEMENT
- 6 TAP-OFF BOXES



(CU)	TYPE	A	B	C	D	a	b	c	d	e
600A	A	90	148	450	340	100	120	100	-	-
800A	A	100	148	450	340	100	120	100	-	-
1000A	A	113	148	450	340	100	120	100	-	-
1250A	A	130	148	450	340	100	120	100	-	-
1600A	A	170	148	450	340	100	120	100	-	-
2000A	A	210	148	450	340	100	120	100	-	-
2500A	A	250	148	450	340	100	120	100	-	-
3200A	A	346	148	450	450	140	150	140	-	-
4000A	B	426	148	450	540	130	130	130	130	-

ELEMENTS & DIMENSIONS (FITTINGS)

DIMENSIONS(2)

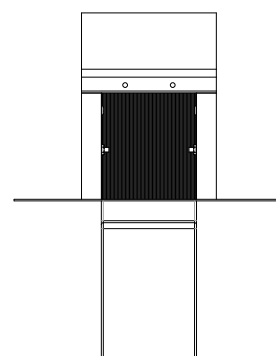
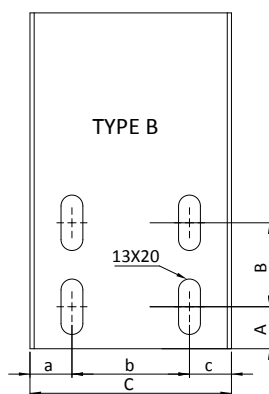
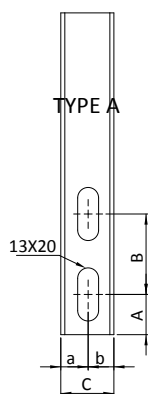


Figure 1

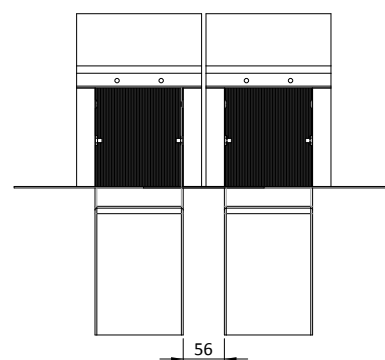
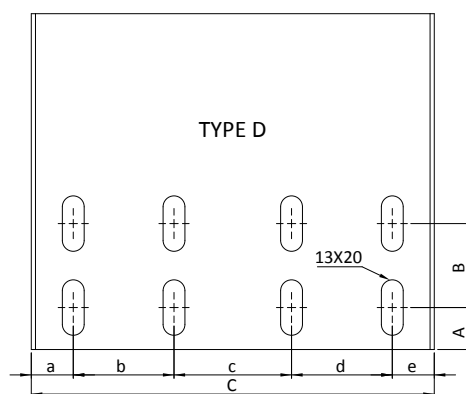
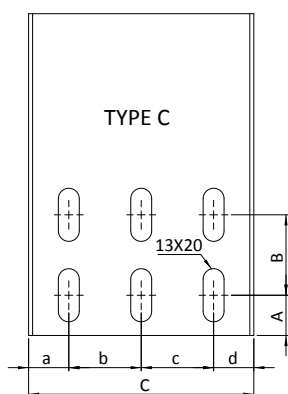


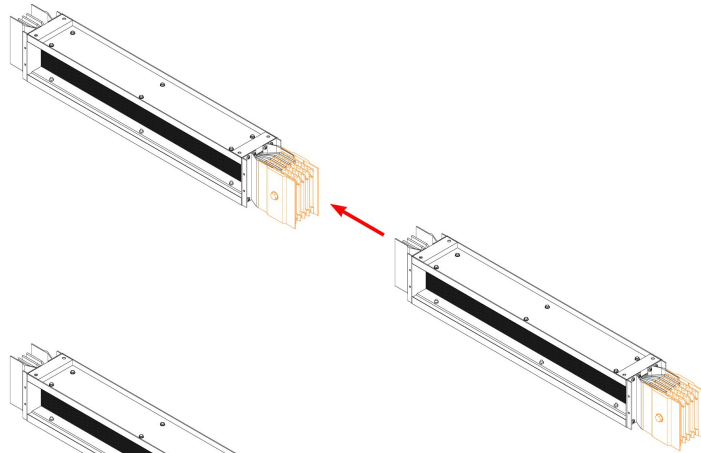
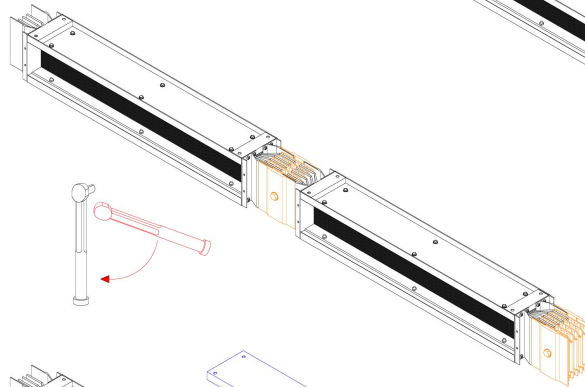
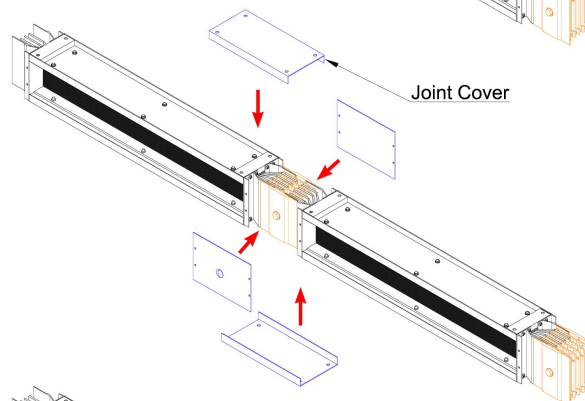
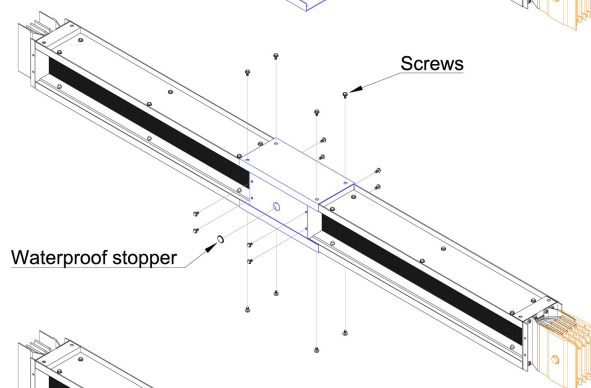
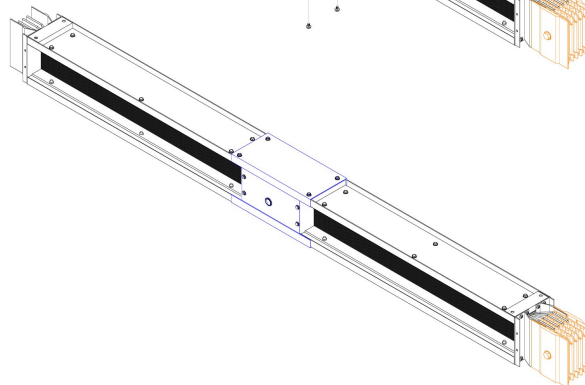
Figure 2

DIMENSIONS DETAIL

(CU)	TYPE	Figure	A	B	C	a	b	c	d	e
600A	A	1	25	50	40	20	20	-	-	-
800A	A	1	25	50	50	25	25	-	-	-
1000A	A	1	25	50	63	31.5	31.5	-	-	-
1250A	A	1	25	50	80	40	40	-	-	-
1600A	B	1	25	50	120	25	70	25	-	-
2000A	C	1	25	50	160	25	55	55	25	-
2500A	D	1	25	50	200	25	50	50	50	25
3200A	B	2	25	50	120	25	70	25	-	-
4000A	C	2	25	50	160	25	55	55	25	-

Busway Assembly Instructions

7

Step1 - Joining two units**Step 2 - Torque 85 N.m****Step 3 - Put on the covers****Step 4 - Tighten the screws and put on the waterproof stopper****Step 5 - Installation completed**

TECHNICAL DATA

TECHNICAL DATA / TECHNICS / TECHNICAL INFORMATION

FIRE - RESISTANT COPPER CONDUCTORS-RAME

Rated Current (Ambient Temperature 40℃)	Amps	600	800	1000	1250(1350*)	1600	2000	2500	3200	4000
Reference Standard	CNS14286, IEC60331, BS6387									
Operation Voltage	Volts	1000								
Frequency	Hz	50/60								
Protection Degree (IP Class)	IP 55/IP 65/IP 66, IP 67/68***									
Phase Rated Short-Circuit withstand	KA	32	32	50	50	65	65	65	100	100
Phase Rated Peak Short-Circuit withstand ≥3 Cycles	KA	65	65	105	105	143	143	143	220	220
Impedance Value										
Phase Resistance (R20)	mΩ/m	0.096	0.076	0.054	0.042	0.03	0.023	0.0175	0.015	0.0115
Phase Reatance (X)	mΩ/m	0.03	0.025	0.02	0.021	0.017	0.013	0.01	0.006	0.005
Phase Impedance (Z)	mΩ/m	0.101	0.080	0.058	0.047	0.034	0.026	0.020	0.016	0.013
Thermal Phase Resistance (Rt)	mΩ/m	0.127	0.056	0.052	0.039	0.029	0.024	0.018	0.012	0.0115
△V=mV/M/A For Distributed Load	cos = 0.7	0.0886	0.0711	0.0521	0.0444	0.0331	0.0254	0.0194	0.0148	0.0116
	cos = 0.75	0.0918	0.0735	0.0537	0.0454	0.0337	0.0258	0.0197	0.0152	0.0119
	cos = 0.8	0.0948	0.0758	0.0552	0.0462	0.0342	0.0262	0.0200	0.0156	0.0122
	cos = 0.85	0.0974	0.0778	0.0564	0.0468	0.0345	0.0264	0.0201	0.0159	0.0124
	cos = 0.9	0.0995	0.0793	0.0573	0.0470	0.0344	0.0264	0.0201	0.0161	0.0125
	cos = 0.95	0.1006	0.0800	0.0575	0.0465	0.0338	0.0259	0.0197	0.0161	0.0125
	cos = 1	0.0960	0.0760	0.0540	0.0420	0.0300	0.0230	0.0175	0.0150	0.0115
Weight (4 Pole)	Kg/m	23	27	33	38	46	60	73	92	120
Number of Trunk		1	1	1	1	1	1	1	2	2
Joule Losses(3RF) at Nominal current	W/m	151.22	107.52	156.00	182.81	222.72	288.00	337.50	368.64	552.00

Note: (*)Please Contact Your Local Agent for Quotation about required Ratings.

Calculate new voltage drop-Vd(3P3W) = Amps Load X $\sqrt{3(R \cos \theta + X \sin \theta)}$, where cos θ = Power Factor.

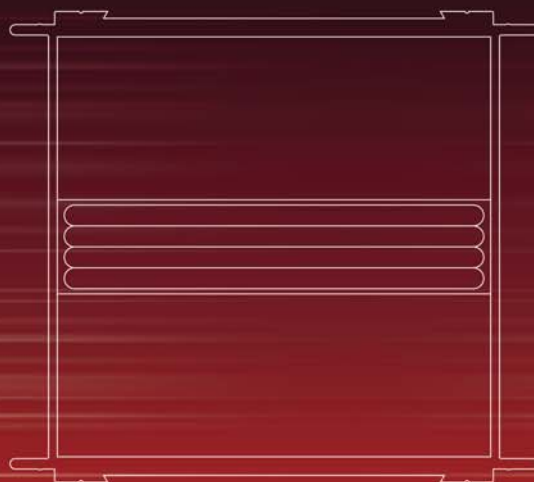
Please Contact Your local Agent for Free Service of COMPAC with electrical calculations.

All Rated Current are Related to an ambient temperature at 40°C.

The Rated Current Should Be Derating as Shown Multipliers by Higher Ambient Temperatures.

35°C	45°C	50°C
1.06	0.96	0.84

Please Do Not Hesitate to Contact Your Local Agent For getting Further Information For Your Needs, or You can Send us an E-mail to info@compacelectric.eu



Your Idea System!

COMPAC ELECTRIC

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