## **DATASHEET - BP-F-400/20/3-F**



Floor standing distribution board, flexible surface mounting,  $W=400\ mm$ ,  $H=2060\ mm$ ,  $D=300\ mm$ 

Powering Business Worldwide

Part no. BP-F-400/20/3-F

Catalog No. 102396

EL-Nummer (Norway)

0002459214

## **Delivery program**

Mounting type		Floor standing distribution board
Material		Sheet steel
Installation site		Indoor
Degree of Protection		IP30
Surface finish		With powder coating
Width	mm	400
Depth	mm	300
Height	mm	2060
Colour		light gray (RAL 7035)

## **Design verification as per IEC/EN 61439**

chnical data for design verification			
Heat dissipation, at an ambient temperature of 35°C, delta T: 20 degrees in top of the enclosure, calculated as per IEC 60890 $$			
Individual enclosure, free-standing	$P_{V}$	W	113
Starting enclosure, free-standing	$P_{V}$	W	103
Middle enclosure, free-standing	$P_{V}$	W	95
Individual enclosure for wall mounting	$P_V$	W	101
Starting enclosure for wall mounting	$P_V$	W	87
Middle enclosure for wall mounting	$P_{V}$	W	74
Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees in top of the enclosure, calculated as per IEC 60890			
Individual enclosure, free-standing	$P_{V}$	W	226
Starting enclosure, free-standing	$P_{V}$	W	206
Middle enclosure, free-standing	$P_{V}$	W	190
Individual enclosure for wall mounting	$P_{V}$	W	202
Starting enclosure for wall mounting	$P_{V}$	W	175
Middle enclosure for wall mounting	$P_{V}$	W	148
C/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Not relevant to indoor installations.
10.2.5 Lifting			Met; assembled and secured as per the latest applicable instruction leaflet.
10.2.6 Mechanical impact			IK07

Meets the product standard's requirements.  10.3 Degree of protection of ASSEMBLIES  10.4 Clearances and creepage distances  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Meets the product standard's requirements.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  U <sub>i</sub> = 440 V AC  4 kV  Does not apply to metal enclosures.  The panel builder is responsibile for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.  10.12 Electromagnetic compatibility  Meets the product standard's requirements.		
10.4 Clearances and creepage distances  10.5 Protection against electric shock  20.1 0; meets the product standard's requirements.  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.2.7 Inscriptions	Meets the product standard's requirements.
10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.12 Electromagnetic compatibility  10.13 Impulse with provide heat dissipation data for the devices.  10.14 Electromagnetic compatibility.  10.15 Insulation properties  20.1 Ω; meets the product standard's requirements.  Is the panel builder's responsibility.  20.1 Ω; meets the product standard's requirements.  20.1 Ω; meets the product standard's requirements.  20.1 Ω; meets the product standard's requirements.  20.1 Ω; meets the product standard's responsibility.  20.2 Ω; meets the product standard's responsibility.  20.3 Ω; meets the product standard's responsibility.  20.4 Ω; meets the product standard's responsibility.  20.5 Ω; meets the product standard's responsibility.	10.3 Degree of protection of ASSEMBLIES	IP30
10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.4 Clearances and creepage distances	Is the panel builder's responsibility.
10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.5 Protection against electric shock	< 0.1 $\Omega$ ; meets the product standard's requirements.
10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  4 kV  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.  Is the panel builder's responsibility.	10.6 Incorporation of switching devices and components	Is the panel builder's responsibility.
10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  4 kV  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  4 kV  10.9.4 Testing of enclosures made of insulating material  Does not apply to metal enclosures.  The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage 4 kV 10.9.4 Testing of enclosures made of insulating material Does not apply to metal enclosures.  The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.  10.11 Short-circuit rating Is the panel builder's responsibility.  10.12 Electromagnetic compatibility Is the panel builder's responsibility.	10.9 Insulation properties	
10.9.4 Testing of enclosures made of insulating material  Does not apply to metal enclosures.  The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.  10.11 Short-circuit rating  Is the panel builder's responsibility.  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.9.2 Power-frequency electric strength	U <sub>i</sub> = 440 V AC
10.10 Temperature rise  The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.  10.11 Short-circuit rating  Is the panel builder's responsibility.  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.9.3 Impulse withstand voltage	4 kV
provide heat dissipation data for the devices.  10.11 Short-circuit rating  Is the panel builder's responsibility.  10.12 Electromagnetic compatibility  Is the panel builder's responsibility.	10.9.4 Testing of enclosures made of insulating material	Does not apply to metal enclosures.
10.12 Electromagnetic compatibility Is the panel builder's responsibility.	10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
	10.11 Short-circuit rating	Is the panel builder's responsibility.
10.13 Mechanical function Meets the product standard's requirements.	10.12 Electromagnetic compatibility	Is the panel builder's responsibility.
	10.13 Mechanical function	Meets the product standard's requirements.

## **Technical data ETIM 7.0**

lecinical data ETIWI 7.0				
Cabinet enclosures (EG000011) / Enclosure/switchgear cabinet (empty) (EC000261)				
Electric engineering, automation, process control engineering / Electrical cabinet, housing, rack / Electrical cabinet (empty) / Electrical cabinet (ecl@ss10.0.1-27-18-01-01 [AGZ056016])				
Width	mm	400		
Height	mm	2060		
Depth	mm	300		
Material		Steel		
Material quality		Other		
Surface finishing		Powder coating		
Colour		Grey		
RAL-number		7035		
With mounting plate		No		
Mounting plate depth-adjustable		Yes		
Number of locks		0		
Floor installation possible		Yes		
Wall fastening possible		No		
Wall build in		No		
Pole fastening		No		
Tackable		Yes		
Number of doors		0		
Suitable for metrical mounting		Yes		
Suitable for outdoor set-up		No		
Pitched roof		No		
EMC-version		Yes		
With glazed door		No		
With ventilation door		No		
With backside door		No		
Impact strength		IK08		
Degree of protection (IP)		IP30		
Degree of protection (NEMA)				