

ALPHA 8HP Molded-Plastic Distribution System

General Data

Introduction

Technical specifications

Rated current in A	250	400	630	1000
Rated operational voltage U_o in V	690 AC, 600 DC			
Rated insulation voltage U_i in V	1000 AC, 1200 DC			
Molded-plastic group I acc. to DIN VDE 0110 Parts 1 and 2/01.89	600 ≤ CTI For the installed devices, the specifications listed in the catalogs are applicable			
Rated withstand voltage/pollution degree	8 kV/3			
Minimum air clearances in mm	8			
Minimum creepage distances in mm	12.5			
Rated current				
• Busbars in V	250	400	630	1000
• Built-in devices in A	up to 800			
• Infeed in A	up to 1800			
Degree of protection acc. to EN 60529, DIN VDE 0470	IP65 (8HP1 520 cable entry plate and incoming feeder panel with additional measures)			
Color				
• Enclosure parts	RAL 7035, light gray			
• Transparent cover	Colorless			
• Cable space cover	RAL 7035, light gray			
Ambient temperature in °C	−40 to +55			
Busbars				
• Rated current in A	250	400	630	1000
• Bar dimensions				
- main conductor L1, L2, L3 in mm	12 × 5	20 × 8	2 × 20 × 8	2 × 30 × 10
- N and PE bar in mm	12 × 5	20 × 8	20 × 8	30 × 10
• Infeed				
- single-sided in A	250	400	630	1000
- centered in A	400	800	1000	1800
Short-circuit strength of the busbar				
• Rated current at 85 °C bar temperature in A	250	400	630	1000
• Max. spacing of busbar supports				
- 307 mm I_{th} (1 s) in kA	10	20	30	40
- 307 mm I_s in kA	40	70	70	80
- 614 mm I_{th} (1 s) in kA	10	20	30	30
- 614 mm I_s in kA	40	70	70	60

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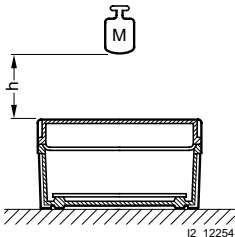
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Characteristics

	Test according to	Enclosure base parts, opaque cover, cover plates	Transparent cover	Cable entry plate, cover lock
Material		Glass-fiber reinforced polyester	Polycarbonate/Macrolon	PBTP-GV
Electrical characteristics - Surface resistance in Ω - Tracking resistance - Specific insulation resistance in Ω/cm	DIN 53482 DIN 53480 DIN 53482	$> 10^{12}$ Level KA 3c $> 10^{14}$	$> 10^{15}$ Level KA 1 $> 10^{16}$	$> 10^{13}$ Level KB 225 $> 10^{16}$
Physical characteristics - Density in g/cm^3 - Water absorption in %	DIN 53479/B DIN 53495/C	1.7 0.20	1.2 0.15	1.37 0.45
Temperature resistance - Flammability - Continuous operating temperature in $^{\circ}\text{C}$	DIN VDE 0304/3	BH2 < 10 mm 120	BH2 < 30mm 115	BH2 < 30 mm 120
Mechanical characteristics - Bending strength in N/mm^2 - Notched bar impact strength in kJ/m^2 - Impact strength in kJ/m^2	DIN 53452 DIN 53453 DIN 53453	120 40 50	90 > 25 not broken	140 -- 45
Chemical resistance - Acid (weak) - Alkali (weak) - Alcohol - Gasoline - Benzene - Grease and oil - Chlorinated hydrocarbons		resistant resistant resistant resistant resistant resistant	resistant conditionally resistant resistant resistant use polyester cover conditionally resistant use polyester cover	resistant conditionally resistant resistant resistant resistant resistant

Impact strength according to Belgian standard NBN C20-001 and French standard NF C20-010

	Degree of protection	Code	Test values		Enclosure base part	Cover
			M kg	h m		
	IP65	7	1.5	0.4	8HP1 101 8HP1 102	8HP1 201 8HP1 202/8HP1 212
	IP65	8	5	0.2	8HP1 103 8HP1 104	8HP1 203 8HP1 204
	IP65	10	15	0.235	8HP1 101 8HP1 102 8HP1 103 8HP1 104	8HP1 221 8HP1 222 8HP1 223 8HP1 224
	IP65	11	15	0.4	8HP1 102 8HP1 107	8HP1 232 8HP1 247