Langmatz Polycarbonate Equipment Cabinets

For LV network switchgear, telecoms, traffic control and general

Langmatz reinforced polycarbonate equipment cabinets are made from an extremely robust, heat resistant, flame retardant, corrosion-resistant and weather resistant engineering thermoplastic: structural foamed polycarbonate.

This material has excellent impact strength and is resistant to chemicals, oils and greases including cracking from solvents and aerosols.

It is completely safe to handle, cut, drill and tap. It is also fully recyclable.

Langmatz polycarbonate cabinets have proven their worth for well over 25 years and in installations throughout Europe, Australia and NZ. Polycarbonate is a long-lasting, weather-resistant material, unlike GRP (glass reinforced polyester) which is not generally suitable for New Zealand outdoor applications.

For LV network switchgear applications, where cabinets are often located in publicly accessible places, assurance of safety is provided by compliance with the requirements of AS/NZS 3439-5.

Safety and security are assured by the absence of exposed fixings, and the hinged lockable doors with fully insulated lock and 5-point latching. All mounting screws and fixings are 316 grade stainless steel. The lifetime of the doors is the same as the lifetime of the cabinet.

Mounting points are provided for fastening of vertical or horizontal DIN standard disconnects and fuse holders that withstand all normal forces applied during cable fastening and the installation / removal of fuses.

Ground planted and surface mount cabinets are available in a range of colours. Cabinets can be pre-fitted with busbars, mounting panels and equipment as required.

Langmatz Polycarbonate Equipment Cabinets

Cabinet, door specification

Parameter	Test method	Requirement	Comments
Impact resistance (all sides)	AS/NZS 3439-5	15 kg sand bag from 1 m height	
		2 kg steel ball from 1 m height	
		5 kg sharp point from 0.4 m (20 J)	
Lateral tensile strength (top edge)	AS/NZS 3439-5	1,200 N for 5 minutes	
Distributed top load	AS/NZS 3439-5	8,500 N/m^2 for 5 minutes	
Torsional strength	AS/NZS 3439-5	2,000 N for 30 seconds	
Base mechanical strength	AS/NZS 3439-5	1,000 N	Pipe test
Heat resistance	AS/NZS 3439-5	100°C / 125°C	3.2 mm rod dent impact test / 2 kg steel ball point test
Ingress protection rating (cabinet)	DIN 40050	IP44	When installed in accordance with instructions[1]
Ingress protection rating (lock)	DIN 40050	IP65	Water proof and dust proof
Flame resistance	UL 94	V1	Burning stops within 30 seconds, no flaming drips
Flame resistance (surface)	DIN 53483 Part 3	K1 / 8 mm	Flame does not reach measuring mark at 150 mm
Flame resistance (edge)	DIN 53483 Part 2	F1 / 8 mm	
Dielectric strength	DIN 53481 Part 4.2.2	30 kV/mm	
Chemical resistance	-	Resistant to hydrocarbons including oil, grease, petrol	
Weather resistance	EN 50298 and 60439-5	No change in resistance	
	ISO 4892-2 Process A	>70% retained flexural strength	

Materials

Component	Material	Comments
Cabinet, door	Structural, foamed polycarbonate	Zero residual stress
Fixings	Stainless steel 316 / 1.4301	
Tie-bars	Galvanised steel	

Configurations

Cabinet						In-ground base			Surface mount base		Doors
Hamer code[2]	Max. number of ways (vertical disconnects)		Width (mm)	Height above base (mm)	Depth (front to back) (mm)	Hamer code[2]	Height above ground (mm)	Depth below ground (mm)	Hamer code[2]	Height above ground (mm)	Hamer code
	DIN2/3	DIN00									
LA460CAB	3	7	460	870	330	LA460IG	300	600	LA460SB	330	LA460DOOR
LA595CAB	4	9	595			LA595IG			LA595SB		LA595DOOR
LA795CAB	6	13	795			LA795IG			LA795SB		[3]
LA1120CAB	9	19	1120			LA1120IG			LA1120SB		[3]

Accessories
Door stay: LASTAY
Black door handle: LAHANDLEB

Colour
Refer to note 2; other colours available on request

Options
Pre-fitted with busbars, neutral-earth bar
Street lighting and other auxiliary supplies
MDIs / metering / monitoring
Identification / warning labels to network requirements
Locking arrangements
Inspection window

Notes
1. On request, cabinets can be supplied with degree of protection up to IP54
2. Colour: add suffix GY for Grey RAL 7035; add suffix GN for rainforest green (AS2700 G15) RAL 6003; add "A" for anti-graffiti formula
3. Contact Hamer for more information

Other literature available on request
Test reports, drawings, technical data sheets, installation instructions, O&M guidelines

For more information contact your Hamer representative
Hamer Limited reserve the right to amend product details without notice.
DS0004 01-17

Langmatz