

System solutions for every lift. Everywhere.

Compact Control panel 222 S



Control Module 222 S

A Reliable System for your Lift



- Speed up to 120 mpm
- Grouping up to 8 lifts
- Frequency inverter control for soft starts and stops of lift cabin
- Low power consumption PCB's with SMT technology
- Compact design
- Flexibility for customized layouts
- Plug and play solution
- Operation mode for permanent magnet motor
- Easy controller programming
- Selective up and down button



German technology with



Brazilian production



- Failure report, 100 last
- Cancellation of false calls
- Group and duplex special calls
- Programming of missing floors and long floors
- Door operator customization, main and opposite
- Easy Button Programming
- Easy programming of displays
- Access to parameters in the pass-through box (connection in the pass-through box)
- Easy Group Programming
- Upload and download of faces
- Zoning Schedule
- Operation Firefighter phase 1 and phase 2

Control Panel 222 S

Technical data	
Stops:	48 Stops – 1 to 2 Buttons per Floor
Maximum Grouping:	2 to 8 Grouping Elevators *
Speed:	45 mpm up to 120 mpm
Activation:	VVVF – Frequency Inverter
Models:	Alternating current – AC / Direct current – DC
Control Module:	Microprocessor
Power Supply Voltage:	220 VAC/380 VAC
Frequency:	60 Hz
Safety Circuit power supply:	110 VAC
Brake Tensions:	65 and 125 VAC **
System Programming / Parameterization	Yes
Remote Programming Unit (D & T)	
Emergency Operation	Firefighter/Fire
Opening Time and Door Lock	Programmable
Parking in Main Floor	Yes (programmable)
Canceling False Calls	Yes (programmable)
Cancellation of Calls per Button “stuck”	Yes
Open Door Indication	Visual and Sound
Fault View	Yes
Failure Reporting (last 100)	Yes
Door Fault Checking	Yes
Protections (Against)	
1 – Lack of phase	Yes
2 – Phase shift	Yes
3 – Short Circuit	Yes
4 – Opening of Safety Line	Yes
5 – Atmospheric Discharges	optional
Cable Connector System	Spring Type/Plugged Type
Reset button for Lift	Yes
Dimensions (LxAxP)	800 x 750 x 300 mm or
Without base cabinet	1000 x 1000 x 350 mm**
Cabinet	Coated Carbon Steel in Exposed Gray Munsell
Base Cabinet	Optional



* Group system needed for sale the router separately.

** Check for voltages availability.

*** Depending on the frequency inverter (on request).

Compact Control panel 222 S

System Boards and Accessories



■ CPU MODULE

■ I/O MODULE

Key Features

CPU board of the control board used for main processing of the command with battery for reset clock and connector for access to D & TCPU SERIAL MODULE CNF222-S

Control panel I/O board used for input interface and control outputs

Technical features

Mechanical data

Fixation

Fixing in the base of the Rack of plates

Fixing in the base of the Rack of plates

Dimensions (H x W x D)

100 x 150 x 30 mm

100 x 150 x 30 mm

Electrical characteristics

Doors

64-pin connector attached to the base of the Rack

64-pin connector attached to the base of the Rack

Rated Voltage

24 VDC

24 VDC

Power Supply Current

80 mA

20 mA

Maximum Output Current

N/A

100 mA

Serial Connection

RS485

N/A

Room Temperature

-25 °C ... +70 °C

-25 °C ... +70 °C

Information and Operation (LED)

Yellow LED triggered function enabled

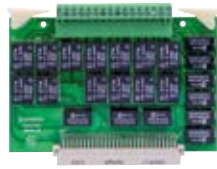
Yellow LED triggered function enabled



The boards are all grouped inside the Rack MODULE.



■ CALL MODULE



■ RELAY MODULE



■ 3TxRx MODULE



■ TxRx MODULE

Board Call of the control panel used for call interface, limit signals limit signs of positioning of the lift

Relay board a of the control panel used to interface all functions that must be switched by cotator or directly on the lift, speed signals, doors, brake, ventilations

The 3TxRx board acts on all serial command signals

The TxRx card acts on all signals related to a duplex

Fixing in the base of the Rack of plates 100 x 150 x 30 mm	Fixing in the base of the Rack of plates 100 x 150 x 30 mm	Fixing in the base of the Rack of plates 55 x 30 x 10 mm	Fixing in the base of the Rack of plates 46 x 22 x 10 mm
64-pin connector attached to the base of the Rack	64-pin connector attached to the base of the Rack	10-pin connector attached to the base of the Rack	10-pin connector attached to the base of the Rack
24 VDC	24 VDC	–	–
20 mA	5 mA	40 mA	10 mA
100 mA	1 A	N/A	N/A
N/A	N/A	One Wire	RS485
–25 °C ... +70 °C	–25 °C ... +70 °C	–25 °C ... +70 °C	–25 °C ... +70 °C
Yellow LED triggered function enabled	Yellow LED triggered function enabled	Yellow LED triggered function enabled	Yellow LED triggered function enabled

Compact Control panel 222 S

System Boards and Accessories



■ ROUTER MODULE

■ TOTEM MODULE

Key Features

Router board is responsible for the elevator group management is endowed with connection to the HMI - D & T

The Totem Plate is responsible for executing the interface of the cabin buttons with the control panel

Technical features

Mechanical data		
Fixation	ABS housing mounting	Attachment to plastic base
Dimensions (H x W x D)	155 x 110 x 30 mm	140 x 40 x 30 mm
Electrical characteristics		
Doors	8 connectors with 4 pins for interconnection with controls	18 connectors wit 4 pins for interconnection with controls
Rated Voltage	24 VDC	24 VDC
Power Supply Current	40 mA	10 mA
Maximum Output Current	N/A	N/A
Serial Connection	RS485	One Wire
Room Temperature	-25 °C ... +70 °C	-25 °C ... +70 °C
Information and Operation (LED)	Yellow LED triggered function enabled	Yellow LED triggered function enabled



■ VOX MODULE



■ PROTE MODULE



■ JUNCTION BOX MODULE

The Vox Board is responsible for the pavement recordings and service information, it is fixed in the transit box

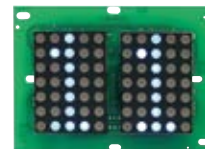
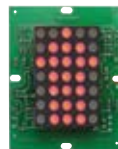
Prote plate is responsible for monitoring the entire safety line of the lift control, Germany certified plate (TÜV).

Pass-through board is responsible for generating information from the cabin information with the command via the traveling cable.

Attachment to the base of the transit box 90 x 70 x 30 mm	Attachment to plastic base 173 x 90 x 77 mm	Fixing in the base junction box 190 x 225 x 30 mm
2 x 10 way connectors	–	–
24 VDC	24 VDC	24 VDC/3A
50 mA	10 mA	30 mA
N/A	3 A	N/A
One Wire	RS485	One Wire
–25 °C ... +70 °C	–25 °C ... +70 °C	–25 °C ... +70 °C
Yellow LED triggered function enabled	Yellow LED triggered function enabled	Yellow LED triggered function enabled

Compact Control panel 222 S

Displays



■ 50 mm 1 digit dot matrix

■ 50 mm 2 digits dot matrix

Key Features

50 mm display
1 digit matrix
used point to make arrows

50 mm display
2 digits matrix point

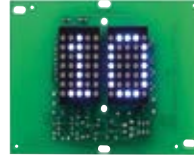
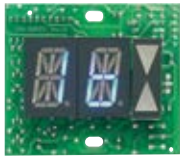
Technical features

Mechanical data

Fixation	Fastening by nut and screw	Fastening by nut and screw
Dimensions (H x W x D)	80 x 70 x 30 mm	80 x 110 x 30 mm

Electrical characteristics

Doors	3 connectors with 3 pins for interconnection with controls	3 connectors with 3 pins for interconnection with controls
Rated Voltage	24 VDC	24 VDC
Power Supply Current	75 mA	75 mA
Maximum Output Current	N/A	N/A
Serial Connection	One Wire	One Wire
Room Temperature	-30 °C ... +80 °C	-30 °C ... +80 °C
Information and Operation (LED)	Yellow LED triggered function enabled	Yellow LED triggered function enabled



■ 20 mm 2 digits alphanumeric

■ 70 mm 2 digits alpha numeric

■ 40 mm 2 digits dot matrix

■ 18 mm 3 digits dot matrix

20 mm 2 digits alphanumeric

70 mm 2 digits alphanumeric

40 mm 2 digits alpha dot matrix

18 mm 3 digits dot matrix

Fastening by nut and screw
55 x 70 x 30 mm
(horizontal)
70 x 55 x 30 mm
(vertical)

Fastening by nut and screw
80 x 110 x 30 mm

Fastening by nut and screw
80 x 110 x 30 mm

Fastening by nut and screw
70 x 55 x 30 mm
(vertical)

3 connectors with 3 pins for interconnection with controls

3 connectors with 3 pins for interconnection with controls

3 connectors with 3 pins for interconnection with controls

3 connectors with 3 pins for interconnection with controls

24 VDC

24 VDC

24 VDC

24 VDC

75 mA

75 mA

75 mA

75 mA

N/A

N/A

N/A

N/A

One Wire

One Wire

One Wire

One Wire

-30 °C ... +80 °C

-30 °C ... +80 °C

-30 °C ... +80 °C

-30 °C ... +80 °C

Yellow LED triggered function enabled

Yellow LED triggered function enabled

Yellow LED triggered function enabled

Yellow LED triggered function enabled

Compact Control panel 222 S

LCD's and TFT



■ LCD 5.3"



■ LCD 3.5"

Key Features

Display blue monochrome
of 5.3 inches

Display blue monochrome
of 3.5 inches

Technical features

	5.3"	3.5"
Screen	5.3"	3.5"
Resolution	–	–
Useful Area (W x H)	–	–
Colors	–	–
Pixel (W x H)	–	–
Supply Current		12÷24 VAC/DC ±10%
Maximum Current Absorption	12 VDC: max. 60 mA 24 VDC: max. 130 mA	12 VDC: max. 60 mA 24 VDC: max. 130 mA
Temperature of Operation	–15 °C ... +50 °C	–15 °C ... +50 °C
Micro SD card	–	–
Picture formats	–	–
Lifespan	100% luminosity 25,000 hours	100% luminosity 25,000 hours
Display Position	–	–
Light Intensity	300 cd/m ²	300 cd/m ²



■ TFT 4.3"



■ TFT 7"

Display colorful
of 4.3 inches

Display colorful
of 7 inches

4.3"	7"
480 (RGB) x 272	800 (RGB) x 480
95 x 53 mm	154.1 x 86 mm
65,000	16 M
0.198 x 0.198 mm	0.1926 x 0.179 mm
12÷24 VDC ±10%	12÷24 VDC ±10%
12 VDC: max. 220 mA 24 VDC: max. 100 mA	12 VDC: max. 360 mA 24 VDC: max. 180 mA
-20 °C ... +50 °C	-20 °C ... +50 °C
512 MB to 8 GB	4 GB to 8 GB
*.bmp, *.jpg, *.jpeg, *.png	*.bmp, *.jpg, *.jpeg, *.png
100% luminosity 25,000 hours	100% luminosity 20,000 hours
Horizontal	Horizontal
250 cd/m ²	340 cd/m ²



The Schmersal Group

In the demanding field of machine safety, the owner-managed Schmersal Group is one of the international market leaders. The company, which was founded in 1945, has a workforce of about 2000 people and seven manufacturing sites on three continents along with its own companies and sales partners in more than 60 nations.

Customers of the Schmersal Group include global players from the area of mechanical engineering and plant manufacturing as well as operators of machinery. They profit from the company's extensive expertise as a provider of systems and solutions for machine safety. Furthermore, Schmersal specialises in various areas including foodstuff production, the packaging industry, machine tool industry, lift switchgear, heavy industry and the automotive industry.

A major contribution to the systems and solutions offered by the Schmersal Group is made by tec.nicum with its comprehensive range of services: certified Functional Safety Engineers advise machinery manufacturers and machinery operators in all aspects relating to machinery and occupational safety – and do so with product and manufacturer neutrality. Furthermore, they plan and realise complex solutions for safety around the world in close collaboration with the clients.

Safety Products



- Safety switches and sensors, solenoid interlocks
- Safety controllers and safety relay modules, safety bus systems
- Optoelectronic and tactile safety devices
- Automation technology: position switches, proximity switches

Safety Systems



- Complete solutions for safeguarding hazard areas
- Individual parametrisation and programming of safety controllers
- Tailor-made safety technology – be it for individual machines or a complex production line
- Industry-specific safety solutions

Safety Services



- tec.nicum academy – Seminars and training
- tec.nicum consulting – Consultancy services
- tec.nicum engineering – Design and technical planning
- tec.nicum integration – Execution and installation

The details and data referred to have been carefully checked.
Subject to technical amendments and errors.

www.schmersal.com.br



facebook.com/schmersalbrasil
youtube.com.br/schmersalbrasil
(15) 3263-9800

 **SCHMERSAL**
Safe solutions for your industry