High voltage matrix

Switching/multiplexing high voltage potential tests

- 2 to 4,8, 16, 32 or 64 point switching matrix for voltages of 5, 10 or 15 kV
- Auto connect discharge relay
- CAN bus control
- 24VDC supply from the CAN bus connector or with a power supply integrated in the device, with an IEC socket
- Standard 19” rack format with height depending on the dimension of the matrix, in stainless steel
- Expandable
- Splitter module to join matrices
- Virtual command panel
- Front LEDs for monitoring active outputs
- Size: L form

The high voltage routers for wide Hipot coverage

The high voltage switching matrix modules are configurable from 4 to>64 test points for each of the two high voltage poles. They have a discharge relay, which can be selected as controlled by the CAN bus or automatic drop, which ensures electrical safety due to the discharge of the high voltage accumulated in the cables or the device under test.

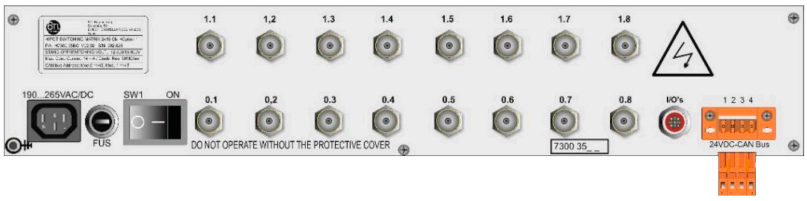
Its reach is as wide as the need to certify insulation in household appliances, motor windings of cable harnesses.

CAN bus control simplifies the interface with the test manager and has a virtual panel for manual control or program debugging.

The activity of each relay is monitored by the LEDs on the front. Also included in the scope of supply are the splitters required to use the same Hipot device with two or more switching matrixes.

Application

Hipot test points routing



Order information

Part number	Supply contents
H7300358A	5-kV Matrix 2x8 relays with discharge relay
H730035BA	5-kV Matrix 2x16 relays with discharge relay
H730035DA	5-KV Matrix 2x32 relays with discharge relay
H7300358B	10-kV Matrix 2x8 relays with discharge relay
H730035BB	10-kV Matrix 2x16 relays with discharge relay
H730035DB	10-kV Matrix 2x32 relays with discharge relay
H7300358C	15-kV Matrix 2x8 relays with discharge relay
H730035BC	15-kV Matrix 2x16 relays with discharge relay
H730035DC	15-kV Matrix 2x32 relays with discharge relay
H730035A1	Option 1 - Power supply (130...260V AC/DC to 24V DC) Build-in

Features

Relays	Units	Version A	Version B	Version C
Maximum switching volts	VDC	3.500	7.000	10.000
Maximum Stand-Off volts	VDC	5.000	10.000	15.000
Maximum Switching current (@ 50W)	mA	10	5	3,33
Maximum Power rating	W	50	50	50
Maximum current at rated switching voltage	mA	14	6	4

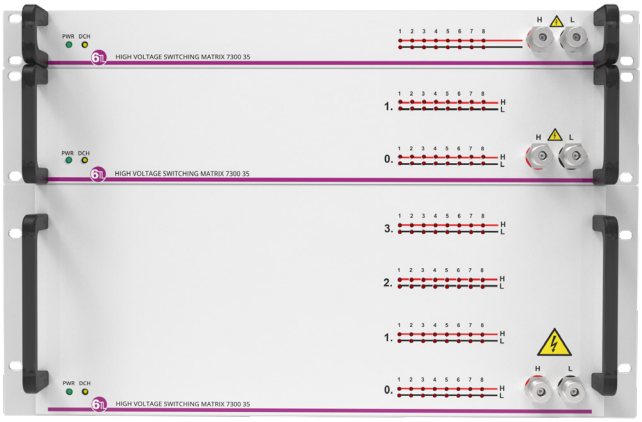
Dielectric	Units	Version A	Version B	Version C
Dielectric withstanding voltage (See level, in V, 50Hz)		6.000	20.000	20.000

Discharge resistor	Units	Version A	Version B	Version C
Discharge resistor	R	20-MOhm	30-MOhm	50-MOhm

External Power Supply Requirements	Units	Version A	Version B	Version C
Voltage	VDC		20...26 +0%	
Maximum current	mA		100	

CAN bus	Units	Version A	Version B	Version C
Transmission speed		Selectable 50, 100, 150 and 250kB/s		
Standard		CAN 2.0B		

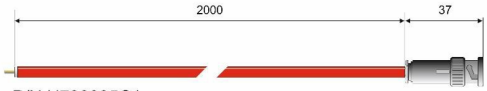
Relays	Units	Version A
Power input socket		IEC C14
Power input fuse		5x20 mm 1A
Power input voltage	VAC/DC	165...265
Power supply output	VDC/W	24V + 5% 25W
Output max. current	I	1,100 mA
Power cord		F CEE 7/7 to IEC C13 (P/N 396200)



Spare parts and related products

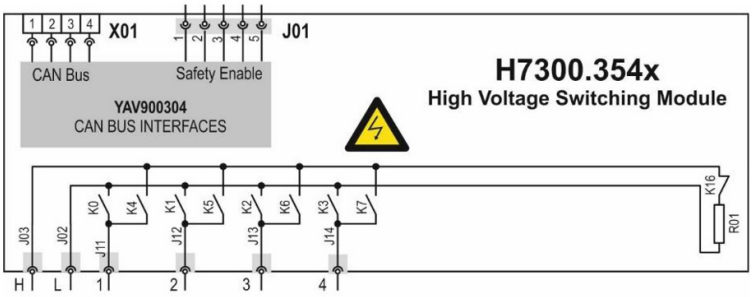
Part number	Component
H730035C2	HV Cable 20kV Single Ended 2m length
H730035C4	HV Cable 10kV SHV Double Ended 1m length Red
H730035C1	HV Cable 05kV SHV Single Ended 2m length
H730035C3	HV Cable 05kV SHV Double Ended 1m length Red

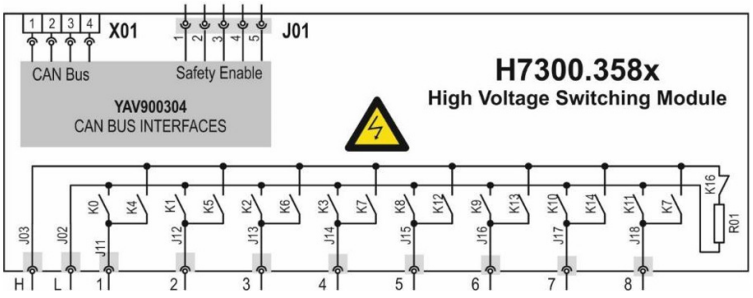
P/N H730035C2

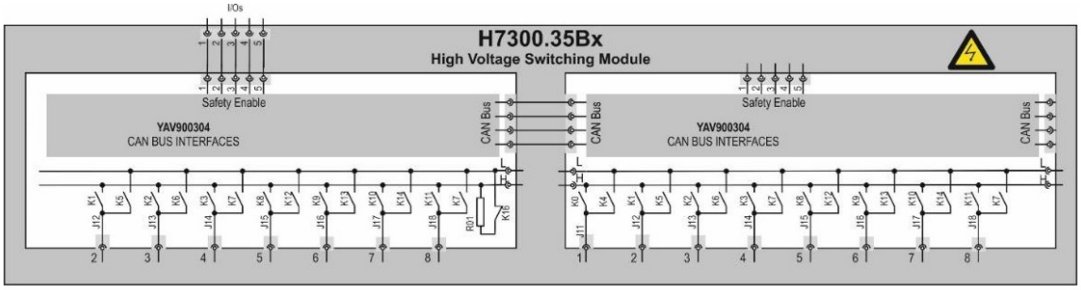


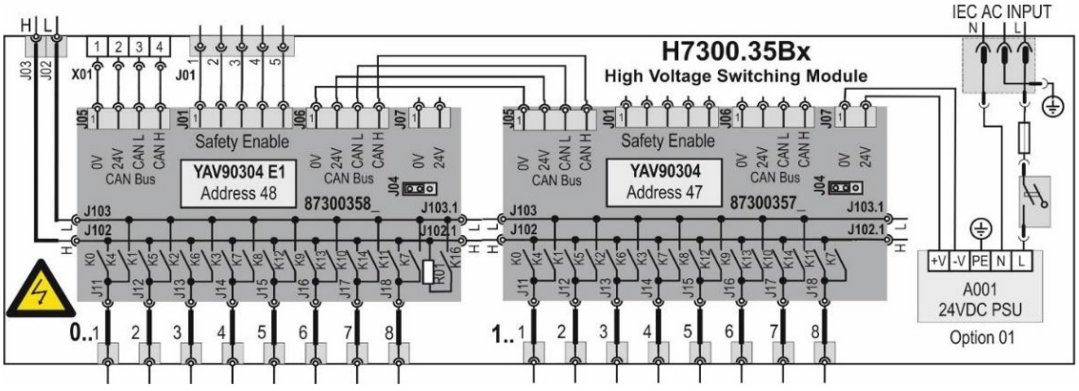
P/N H730035C1

Electric diagrams

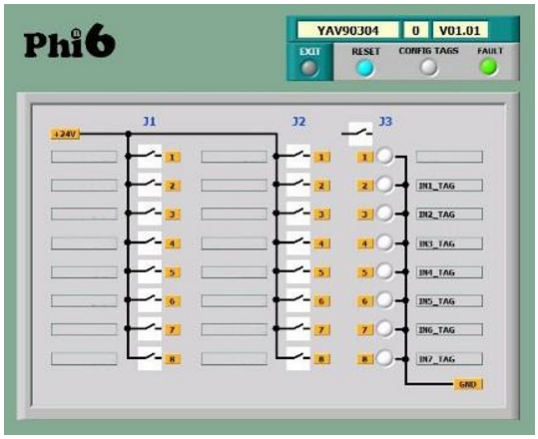
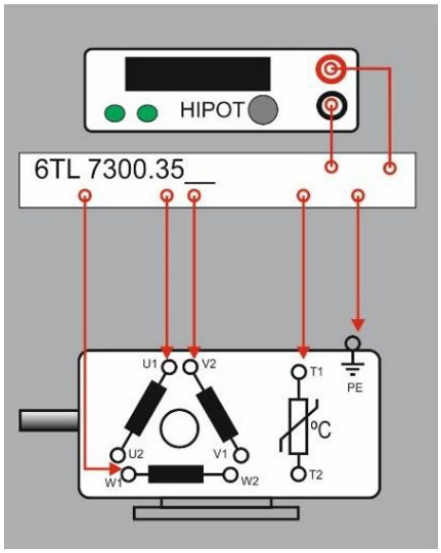
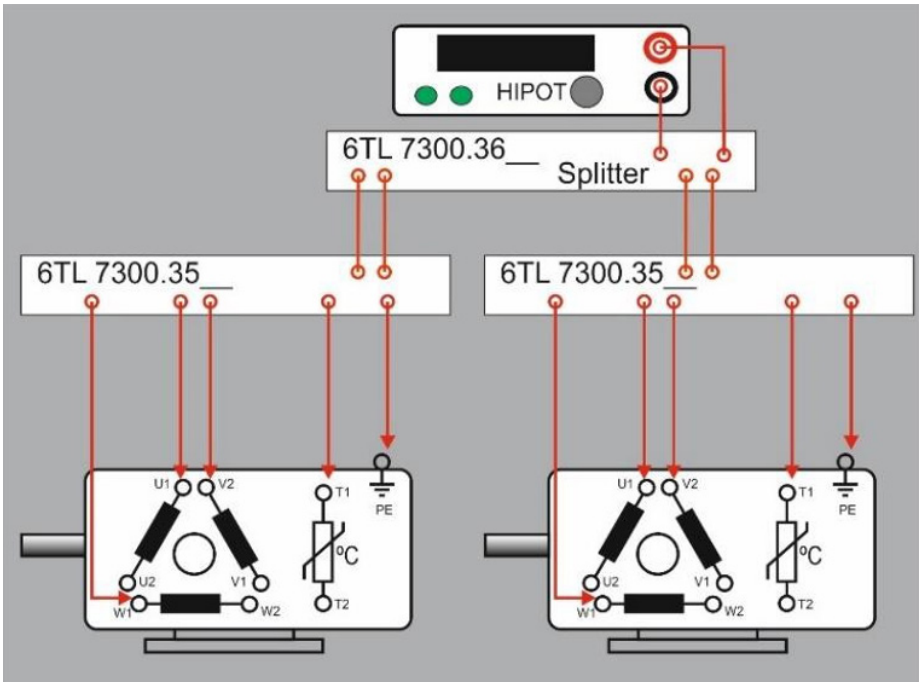
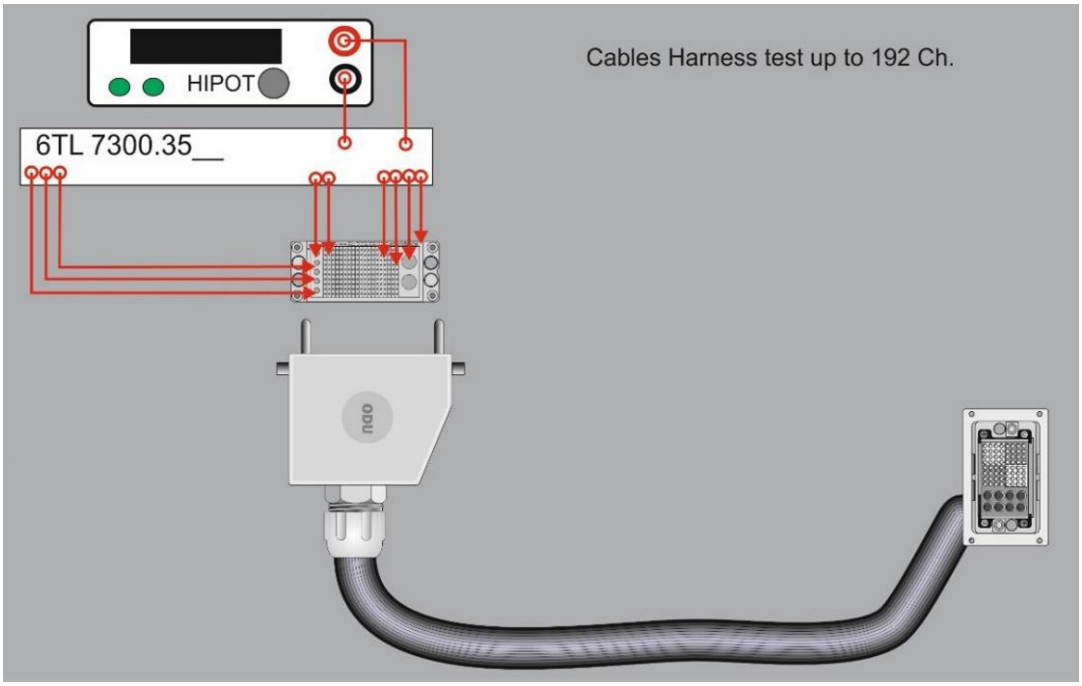








Operating panel



Application examples