

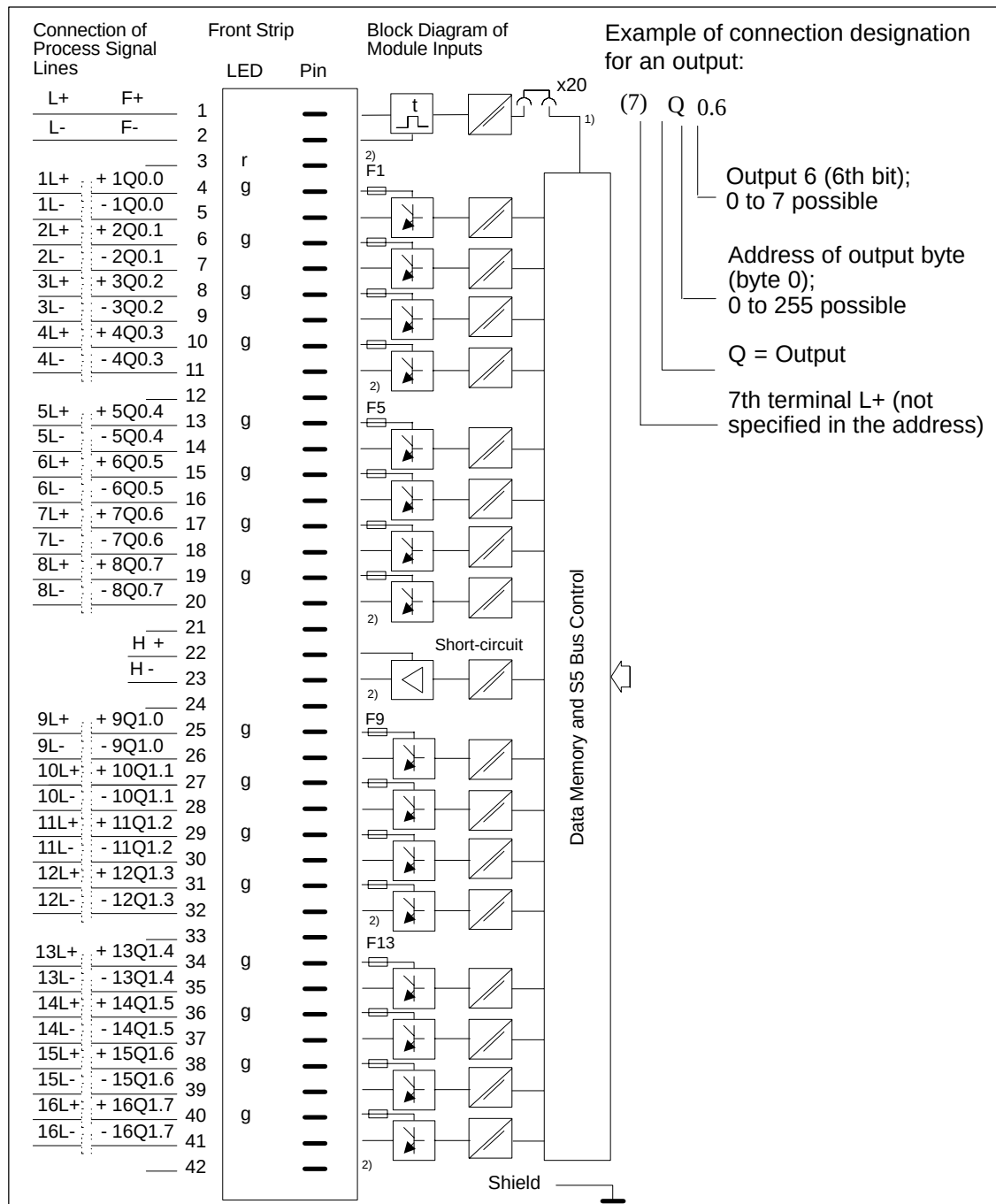
8.4.11 6ES5 453-4UA12 Digital Output Module

Rated supply voltage L+	24 V DC
Number of outputs (decoupled via diodes)	16, short-circuit protected ¹⁾
Isolation	Yes, 16 outputs
Range for supply voltage	20 to 30 V DC
Fusing	16 x 2.5 A, slow
Output voltage for logic 1: (L+)-Switch for logic 0: (L-)-Switch (L+)-Switch (L-)-Switch	L+ - 2.5 V min. 2.5 V max. 3 V max. L+ - 3 V min.
Switching current (resistive, inductive load)	10 mA to 2.0 A ²⁾
Residual current at logic 0	1 mA max.
Switching current for lamps	0.45 A max. (10 W)
Switching frequency with resistive load with inductive load	100 Hz max. 0.2 Hz max. at 1 A; 0.1 Hz at 2 A
Breaking voltage (inductive)	Limited to L+ - 47 V
Total switching current	4 A max. 8 outputs
Coincidence factor (total load capability) ventilated not ventilated	100 % 25 %; 50 % to 20 °C
Permissible line length	400 m max., unshielded
Power supply	
Digital section from system bus	5 V, 120 mA typical
Power dissipation (rated operation)	49.0 W
Enable input (F+/F-)	
Rated input voltage	24 V DC
Input voltage for logic 1 for logic 0	13 to 33 V - 33 to 5 V
Rated input current	5 mA
Permissible line length	200 m max.
Short-circuit monitoring	
Short-circuit indication	Red LED for 16 outputs
Signaling output (H+, H-), floating	Common for all outputs. The signal "1" is generated when a short-circuit occurs at an output.

Output voltage as L+ switch for logic 1 for logic 0	L+ - 5 V min. 3 V max.
Switching current	10 mA max., short-circuit protected
Voltage test to VDE 0160	Between two groups: 1250 V AC Between group and ground point: 1250 V AC
Mechanical specifications	
Dimensions (W x H x D)	40 mm x 255 mm x 195 mm
Weight	Approx. 0.6 kg

1) Short-circuit protection responds with line resistance ≤ 3.6 ohm.

- 2) One digital input is permissible as minimum load.



g = Green LED (status indicator)
 r = Red LED (short-circuit indicator)
 F+/F- = Enable input

- 1) Changeover of enable mode with jumper X20:
 Jumper inserted = Enable input active (factory setting)
 Jumper open = Enable input inactive.
- 2) The terminal is not connected internally. When this terminal is connected to the output voltages, the clearances in air and leakage paths are no longer adequate to UL and CSA, but comply with VDE.