

Digital Output Module 32 x 24 V DC; 0.5 A, Floating

(6ES5 451-7LA21)

Technical Specifications

Number of outputs	32
Galvanically isolated	yes (optocoupler)
- in groups of	8
Load voltage L+	
- rated value	24 V DC
- permissible range	20 to 30 V
- surge voltage at t 0.5 sec.	35 V
Output voltage	
- for "1" signal	min. L+ -2.5 V
Output current for "1" signal	
- rated value	0.5 A
- lamp load	max. 5 W
Leakage current for "0" signal	max. 1 mA
Parallel connection of outputs	not possible
Permissible total current of outputs	100% at 25°C and 50% at 55°C (related to the sum of the currents)
Short circuit protection	electronic
Short circuit indicator	red LED (per group)
Short circuit signal (latching relay contact)	latching ¹
Type of relay	V23042 B201 B101
- load	100V DC; 0.2 A
- switching capacity	20 W or 35 VA
- reset input	24V DC
Limitation of the voltage induced on circuit interruption	- 15 V
Switching frequency	
- inductive load	max. 0.5 Hz
- resistive load	max. 100 Hz
Cable length	
- shielded	1000 m (3281 ft.)
- unshielded	600 m (1969 ft.)
Isolation rating	according to VDE 0160
Rated isolation voltage (between groups)	30 V DC
- isolation group	C
- tested at	500 V AC
Rated isolation voltage (L+ to C)	30 V DC
- isolation group	C
- tested at	500 V AC
Current consumption	
- from 5 V (internal)	100 mA
- from L+ (without load)	17 mA / per group
Power losses of the module	typ. 20 W
Weight	approx. 0.7 kg (1.54 lb.)

Terminal Assignment

Simplified Schematic

¹ Pickup delay: approx. 1 sec. after start of short circuit