Telefast 2 Terminal Block System

Merlin Gerin
Modicon
Square D
Telemecanique

Make *Faster* Connections *Between* the PLC and Your IO *Points*

SQUARE D
Schneider Electric

The fast, modular approach to I/O wiring

Telefast 2

Telefast 2 is an enhanced terminal block that is a prewired interface system for parallel connection of programmable controller I/O signals. As PLCs with high-density I/O cards become more popular due to increased pressures to reduce panel space, solutions such as Telefast 2 are becoming a necessity.

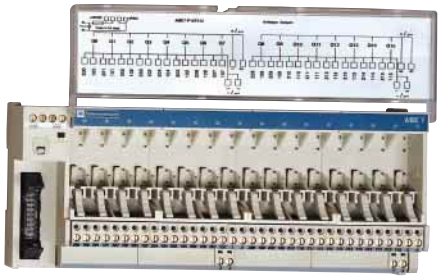
With the proper cable, the Telefast 2 module will connect to most PLCs with high-density I/O cards. A single HE10, 20-pin connector is used to make the connections. Modular, compact units with 8, 12 or 16 channel configurations neatly organize panel layouts.

The use of a single prewired cable makes wiring to PLCs with high-density cards much faster and eliminates errors. The Telefast 2 modules mount on a standard 35mm DIN 3 track, which makes installation quick and easy. There is no longer a need to to cut, strip and mark all those wires – the wiring of products to the module is made easier because of an internal common that is supplied.

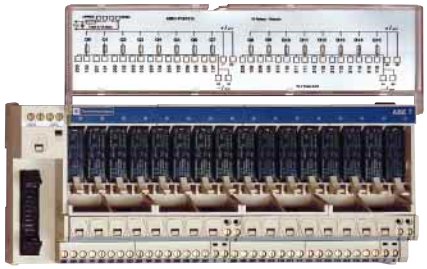
Select the right module for your application

Discrete Logic Signal Modules

Input Modules



Output Modules



Electromechanical Relay Output Modules

Analog Signal Modules

Terminal block modules can be used to connect inputs or outputs. The commons are made on the device and brought into the module by a single wire. The output terminals are on a single row.

Compact modules fulfill the same functions as the terminal block modules but are almost half the size. The output terminals are actually in two rows.

Universal modules are used to connect I/O and all the commons. The potential (0v or 24Vdc) is distributed over all the screw terminals allowing the commons to be connected easily. Modules for two-wire sensors are similar to the universal modules except that they can accept two-wire type 2 sensors when the modules are connected to TSX Micro and Premium PLCs. The output terminals are on two rows. Modules for three-wire sensors have terminals for the signal, 24Vdc and 0V wires of the three-wire sensor on each channel.

Modules with fixed relays come with solid state relays soldered to the internal printed circuit board. Solid state relays are ideal for high speed switching applications. These relays, which provide a high level of electrical durability, will accept sensors of different voltages (24Vdc to 230Vac).

Modules for plug-in relays provide all the advantages of the solid state fixed relays, but can be replaced. The solid state plug-in relays are purchased separately.

Modules with fixed relays come with electromechanical relays soldered to the internal printed circuit board. Electromechanical relays are ideal when circuit isolation is desireable. A compact module which is 50% smaller is available. These relays have one normally open contact. The switching capability is dependent on duty cycle and life required, but can be up to 5A resistive.

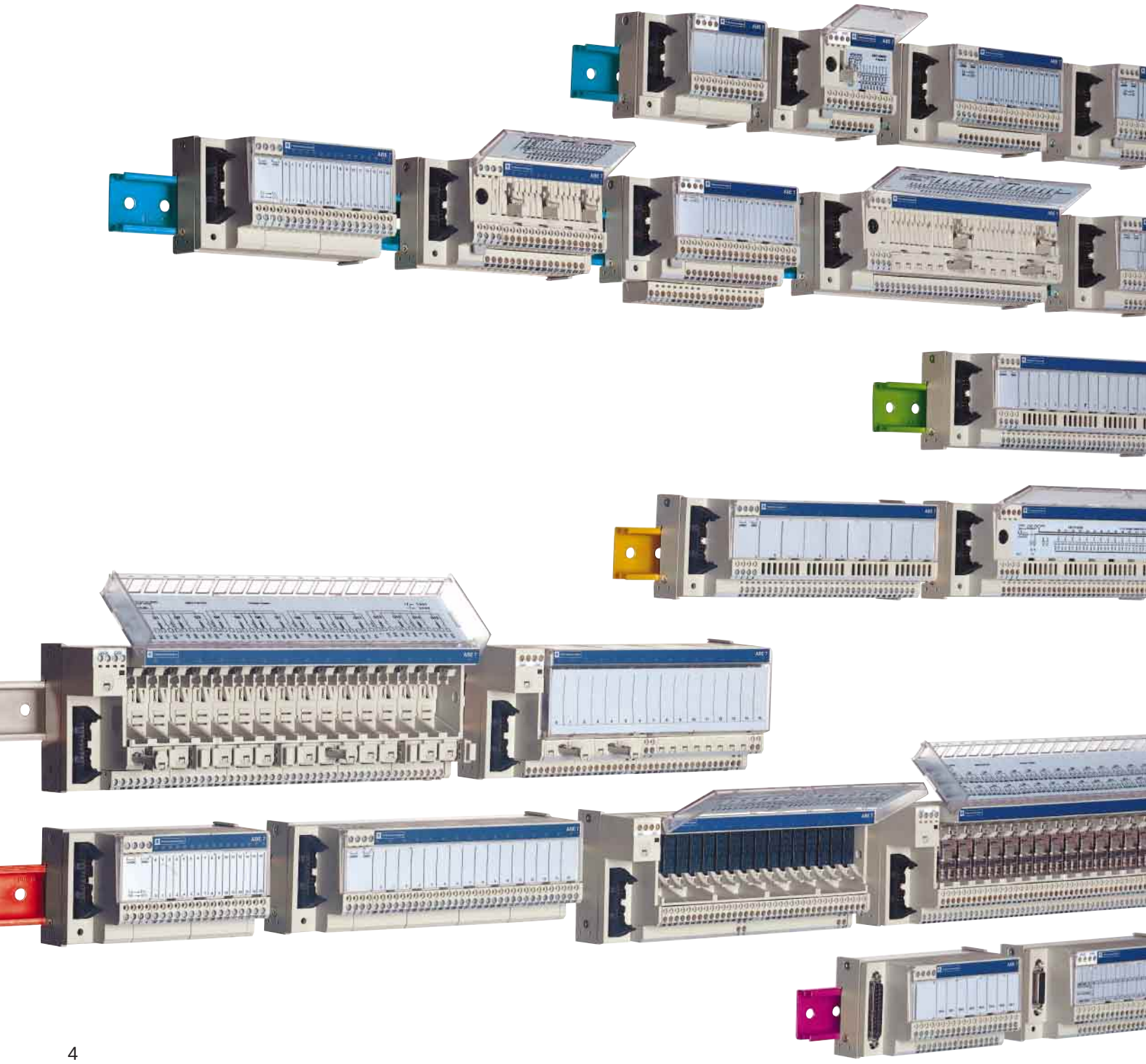
Modules for plug-in relays can be supplied with the plug-in relays already installed or without relays. Electromechanical relays are ideal when circuit isolation is desirable and can be replaced. The relays are available with either:

- One normally closed contact (1NO)
- One normally closed and one normally open contact (1C/O)
- Two normally closed and two normally open contacts (2C/O)

The switching capability is dependent on duty cycle and life required, but can be up to 1A resistive.

Modules for analog signals have been developed to work with TSX Micro and Premium PLCs. They are for analog, counting and axis control functions.

Select the module for your application



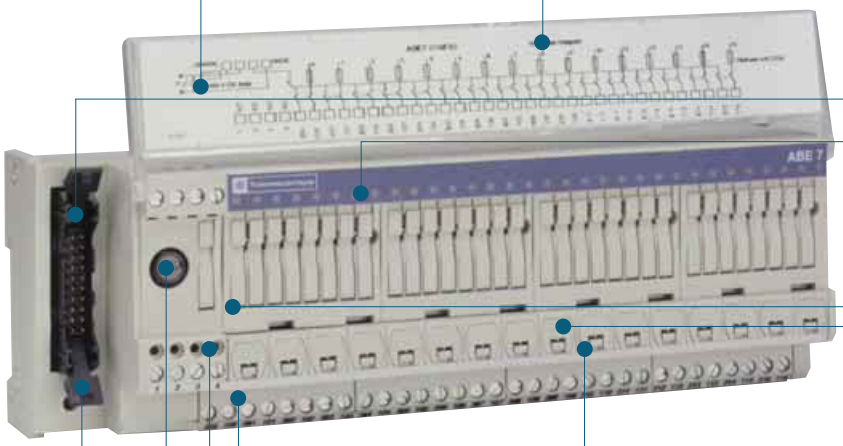





		Kind of signal L (logic), A (analogue)	Input function	Output function	Compact	Number of channels	Number of terminals per channel	LED display per channel	Isolating link per channel	Protective fuse per channel	Process connection voltage	--24 Vdc	--48 Vdc	--48 Vdc	110 Vdc	230 Vdc	Solid state relays	Electromechanical relays	Maximum current	1 N/O	1 C/O Contact arrangement	2 C/O	Module supplied with fixed relays	Module supplied with plug-in relays	Modules without relays installed	
Discrete Logic Signal Module	Terminal Block	L	x	x		8	1				x															ABE-7HO8R10
		L	x	x		8	1	x			x															ABE-7HO8R11
	Universal	L	x	x		8	2	x			x															ABE-7HO8R21
		L	x	x		8	2	x	x		x															ABE-7HO8S21
	Terminal Block	L	x	x		12	1				x															ABE-7H12R10
		L	x	x		12	1	x			x															ABE-7H12R11
	Universal	L	x	x		12	2				x															ABE-7H12R20
		L	x	x		12	2	x			x															ABE-7H12R21
	Compact	L	x	x	x	12	1				x															ABE-7H12R50
	Universal	L	x	x		12	2	x	x		x															ABE-7H12S21
	Terminal Block	L	x	x		16	1				x															ABE-7H16R10
		L	x	x		16	1	x			x															ABE-7H16R11
	For 2 Wire Sensors	L	x	x		16	2				x															ABE-7H16R20
		L	x	x		16	2	x			x															ABE-7H16R21
		L	x			16	2	x			x															ABE-7H16R23
	For 3 Wire Sensors	L	x			16	3				x															ABE-7H16R30
		L	x			16	3	x			x															ABE-7H16R31
	Compact	L	x	x	x	16	1				x															ABE-7H16R50
	Universal	L	x	x		16	2	x	x		x															ABE-7H16S21
	Terminal Block	L	x			16	2	x	x	x	x															ABE-7H16S43
		L		x		16	2	x	x	x	x															ABE-7H16F43
Solid State Relay Input Modules	Fixed Relay	L	x			16	2	x			x					x						x				ABE-7S16E2B1
		L	x			16	2	x				x				x						x				ABE-7S16E2E1
		L	x			16	2	x					x			x						x				ABE-7S16E2E0
		L	x			16	2	x						x		x						x				ABE-7S16E2F0
		L	x			16	2	x							x	x						x				ABE-7S16E2M0
	For Plug-in Relays	L	x			16	2	x			x	x	x	x	x	x									x	ABE-7P16F310
		L	x			16	2	x			x	x	x	x	x	x									x	ABE-7P16F312
Solid State Relay Output Modules	Fixed Relays	L		x		8	2	x			x					x		0.5				x				ABE-7S08S2B0
		L		x		8	2	x			x					x		2				x				ABE-7S08S2B1
		L		x		16	2	x			x					x		0.5				x				ABE-7S16S2B0
		L		x		16	2	x			x					x		0.5				x				ABE-7S16S2B2
	For Plug-in Relays	L		x		16	1	x			x	x	x	x	x	x	x	(1)	x						x	ABE-7P16T210
		L		x		16	2	x			x	x	x	x	x	x	x	(1)	x						x	ABE-7P16T212
		L		x		16	1	x		x	x	x	x	x	x	x	x	(1)	x						x	ABE-7P16T214
		L		x		16	2	x		x	x	x	x	x	x	x	x	(1)	x						x	ABE-7P16T215
		L		x		16	1	x			x	x	x	x	x	x	x	(1)		x					x	ABE-7P16T330
		L		x		16	2	x			x	x	x	x	x	x	x	(1)		x					x	ABE-7P16T332
		L		x		16	1	x		x	x	x	x	x	x	x	x	(1)		x					x	ABE-7P16T334
		L		x		16	2	x	x	x	x	x	x	x	x	x	x	(1)	x						x	ABE-7P16T318
Electromechanical Relay Output Modules	Fixed Relays	L		x	x	8	1	x			x	x	x	x	x		x	3	x			x				ABE-7R08S111
		L		x		8	1	x			x	x	x	x	x		x	4	x			x				ABE-7R08S210
		L		x	x	16	1	x			x	x	x	x	x		x	3	x			x				ABE-7R16S111
		L		x		16	1	x			x	x	x	x	x		x	4	x			x				ABE-7R16S210
		L		x		16	2	x			x	x	x	x	x		x	4	x			x				ABE-7R16S212
	For Plug-in Relays	L		x		16	1	x			x	x	x	x	x		x	4	x				x			ABE-7R16T210
		L		x		16	2	x			x	x	x	x	x		x	4	x				x			ABE-7R16T212
		L		x		16	1	x			x	x	x	x	x		x	4	x	x			x			ABE-7R16T230
		L		x		16	1	x			x	x	x	x	x		x	4		x			x			ABE-7R16T231
		L		x		16	1	x			x	x	x	x	x		x	5		x			x			ABE-7R16T330
		L		x		16	2	x			x	x	x	x	x		x	5		x			x			ABE-7R16T332
		L		x		16	1	x			x	x	x	x	x		x	5			x		x			ABE-7R16T370
Analog Modules	Analog Signals	A	x			-	-				x															ABE-7CPA01
		A	x			8	3				x															ABE-7CPA02
		A	x			8	3				x							(2)								ABE-7CPA03

Enhanced safety and easier maintenance

Telefast 2



Wiring Diagram is printed under the cover of every module. This makes trouble-shooting much easier.

Large Marking Area makes it easy to identify each circuit, making startup and maintenance much easier.

20-way HE10 connector on cable ensures proper wiring between the PLC and the module.

Blown Fuse LED will illuminate when the fuse in the circuit has blown. This can reduce downtime.

Isolation Switch to isolate the 24Vdc supply voltage from the PLC.

Isolation Switch per channel to allow the selective opening and isolation of your inputs and outputs.

Fuse Protection for each channel is available on some modules.

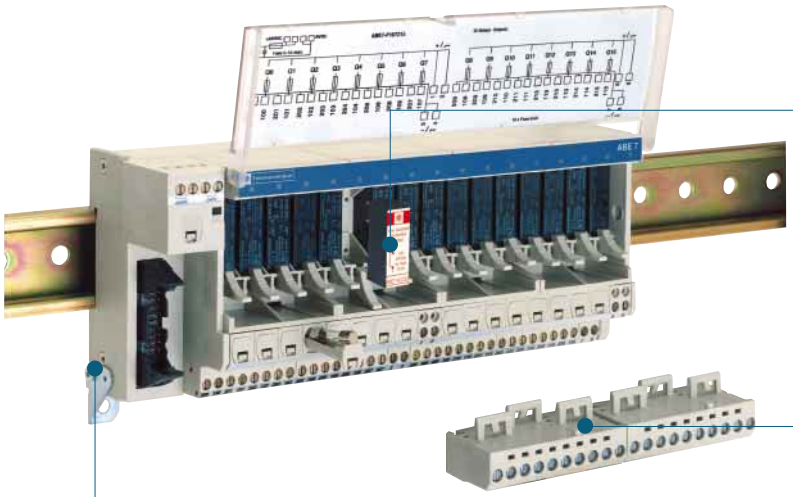
Recessed Hardware to minimize the chance of any accidental contact with live parts.

Test Points for 2.3mm plugs are on most terminals to make troubleshooting more convenient.

Power Supply Fuse to protect the 24Vdc supply voltage from the PLC.

LED Display to give visual indication of when the 24Vdc supply voltage from the PLC is present.

Provide added flexibility



Plug-in continuity block

Clip-on additional terminals makes the wiring of 3 wire sensors easy

Kit for mounting to a panel without 3.5mm DIN3 rail

Enclosure feed-through

Simulation and test block

Specific cables for the connection of Telefast 2 to the majority of present-day PLCs with high density cards

Label marking software

5 x 20 mm Fuse

PLUG-in Relays

Solid state input and output relays

Electromechanical output relays

Splitter blocks

Visit the Square D web site at www.squared.com

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