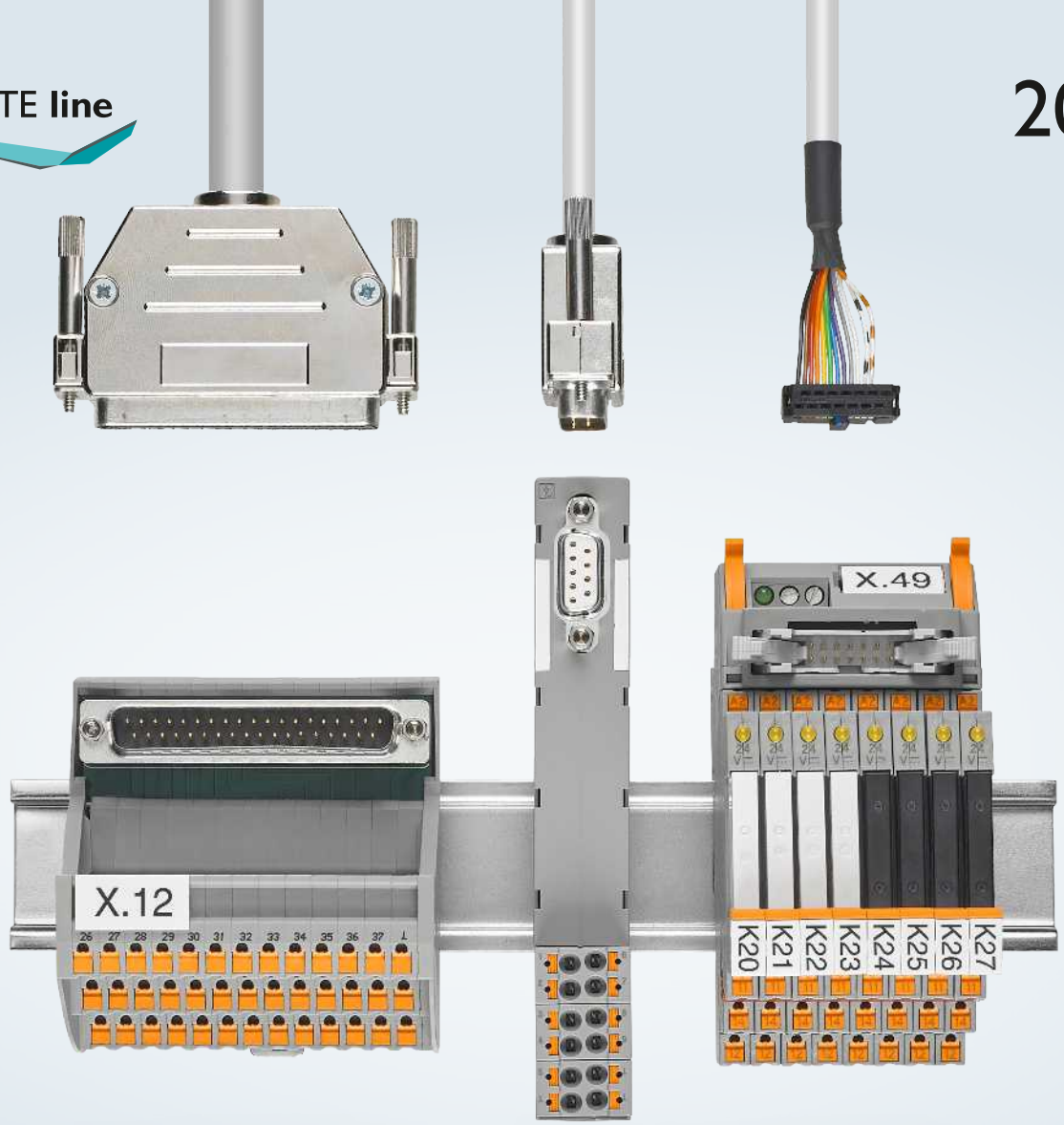
COMPLETE line

2023



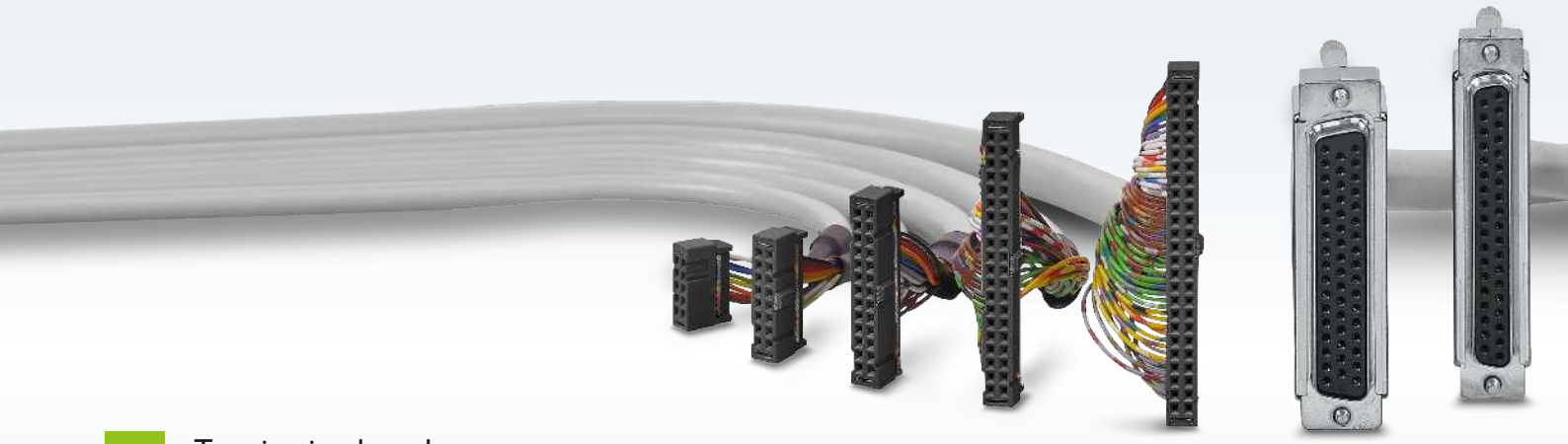
System cabling for controllers

Fast, safe, and error-free wiring of signals

PHOENIX CONTACT

System cabling for controllers
The VARIOFACE product portfolio

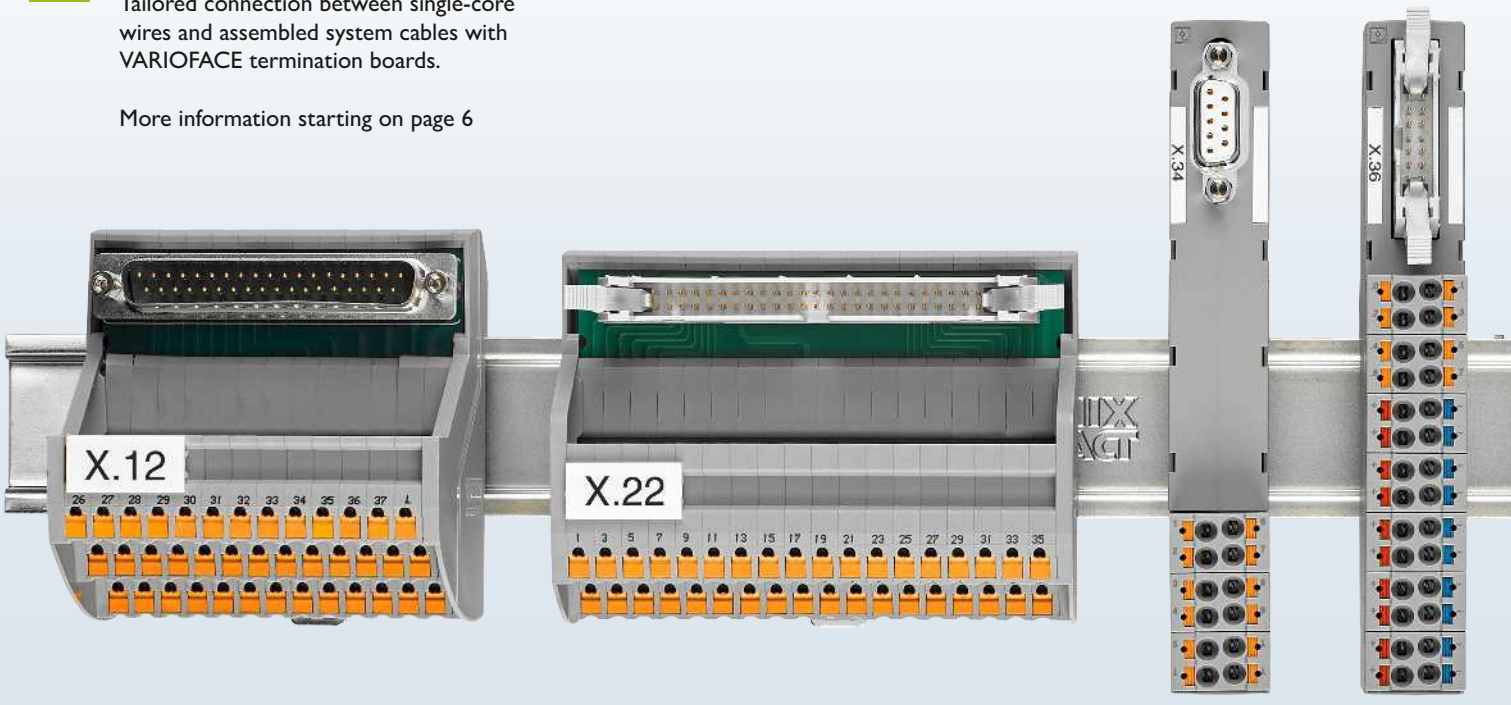
Our VARIOFACE system cabling provides you with compact solutions for the simple planning, assembly, and commissioning of your automation system. Plug-in system cables and termination boards ensure fast, safe, and error-free wiring. This saves you time and reduces your costs considerably.



1 Termination boards

Tailored connection between single-core wires and assembled system cables with VARIOFACE termination boards.

More information starting on page 6





3 Controller-specific system cabling

Optimal adaptation to I/O cards with VARIOFACE front adapters.

More information starting on page 32

2 System cables

Assembled VARIOFACE system cables for quick plug-in connections.

More information starting on page 22





Contents

Termination boards	6
VARIOFACE Professional	8
VARIOFACE Front Connect	14
VARIOFACE PLC-V8 adapters	18
System cables	22
Controller-specific system cabling	32
COMPLETE line	60

COMPLETE **line**

The new standard for the control cabinet.
More information on pages 60 to 63

Reduce wiring effort

The planning, assembly, and commissioning of automation systems often take a large amount of time. Wiring errors and tedious troubleshooting between control level and field level cannot be ruled out. With the VARIOFACE system cabling product portfolio from Phoenix Contact, these difficulties are a thing of the past. Benefit from standardized and individual solutions for front adapters, system cables, and termination boards.

VARIOFACE system cables

Every plug-in connection needs a cable. System cables for IDC/FLK and D-SUB connectors are available preassembled in all lengths.



VARIOFACE termination boards

Wherever connectors need to be connected with single-core wires, termination boards are the perfect solution.

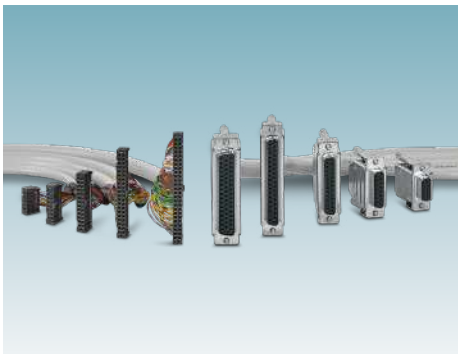


VARIOFACE system cabling: The plug-and-play concept



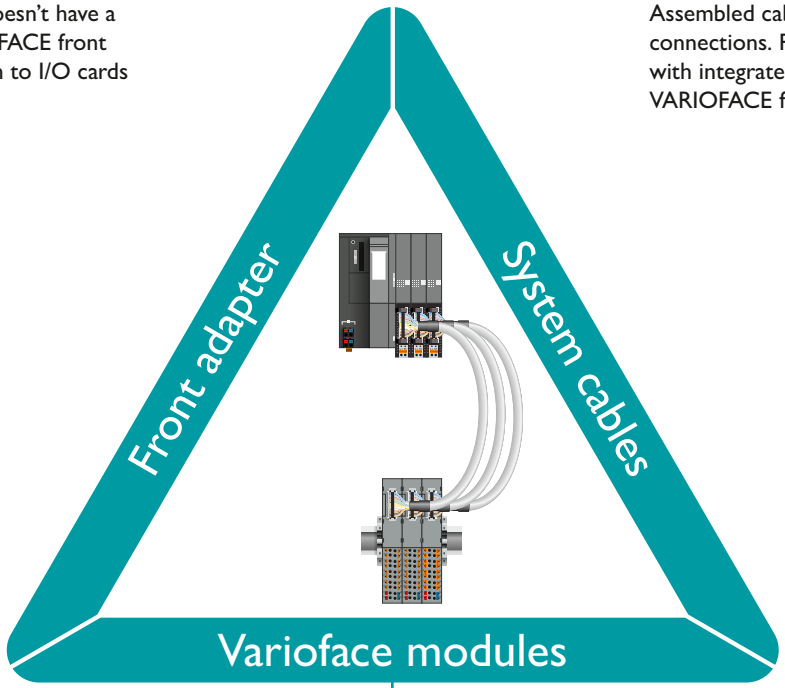
VARIOFACE front adapters

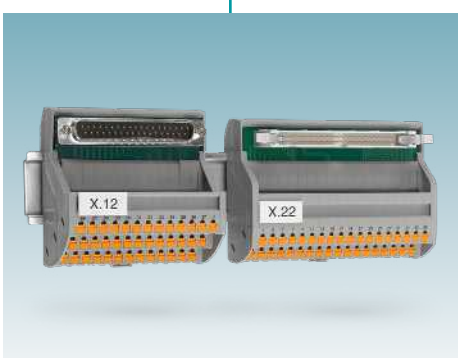
The module you need to wire doesn't have a connector? No problem. VARIOFACE front adapters with tailored adaptation to I/O cards handle this task.



VARIOFACE system cables

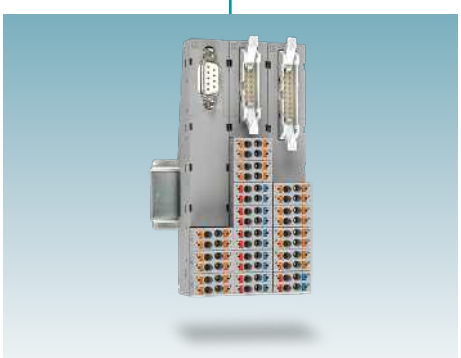
Assembled cables for quick plug-in connections. Plug-and-play to your devices with integrated connector or to our VARIOFACE front adapters.





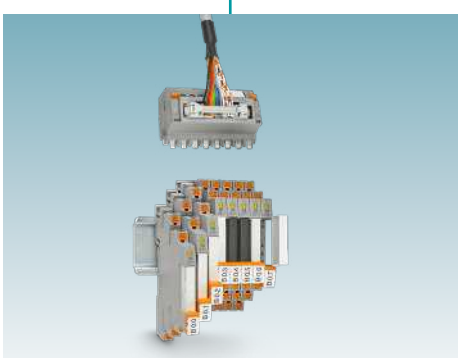
VARIOFACE Professional

Universal termination boards for all applications



VARIOFACE Front Connect

Narrow termination boards with front connections



VARIOFACE V8 adapters

The plug-in connection for relay modules

Termination boards for fast and safe wiring

1

VARIOFACE termination boards ensure reliable signal transmission between the field level and automation level. The universal termination boards couple high-position connectors, such as IDC/FLK, D-SUB, or RJ45, to screw or Push-in connections. In conjunction with our universal system cables, you benefit from fast wiring that is protected against polarity reversal.

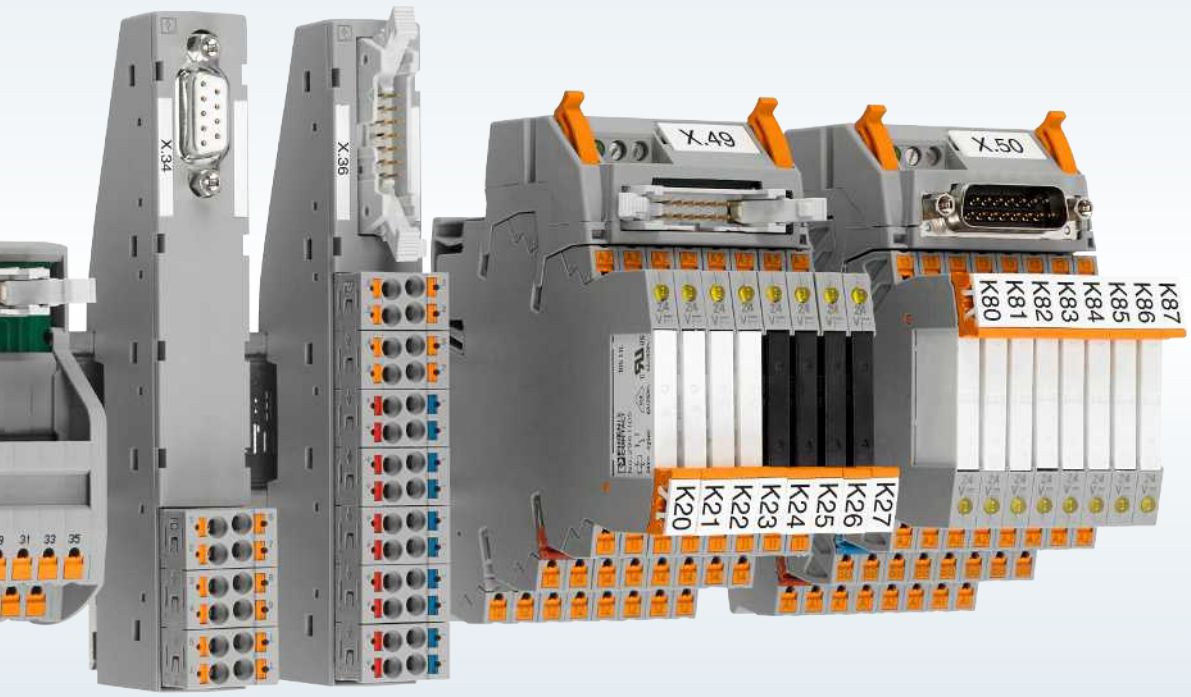
VARIOFACE Professional

Universal termination boards for all applications

More information starting on page 8



	Universal termination boards VARIOFACE Professional	Narrow termination boards with front connections VARIOFACE Front Connect	System cabling adapters for relay applications VARIOFACE V8 adapters
Connection technology	Push-in, screw	Push-in	Plug-in contacts to relay modules for PLC-INTERFACE 6.2 mm / 14 mm relays and RIFLINE complete
Connectors	D-SUB, HD-SUB, IDC/FLK, RJ45	D-SUB, IDC/FLK	D-SUB, IDC/FLK
Number of positions	9, 15, 25, 37, 50 (D-SUB) 15, 26, 44, 62 (HD-SUB) 10, 14, 16, 20, 26, 34, 40, 50, 60, 64 (IDC/FLK)	9, 15 (D-SUB) 14, 16, 20 (IDC/FLK)	15-pos. (D-SUB) and 14-pos. (IDC/FLK)
Special versions	Potential distributors Feed-through modules LED indicator	No	No
Overall width	Type-dependent	19 mm	50 mm (6.2 mm PLC-INTERFACE) 112.5 mm (14 mm PLC-INTERFACE) 128 mm (RIFLINE complete)



VARIOFACE Front Connect

Narrow termination boards with front connections

More information starting on page 14

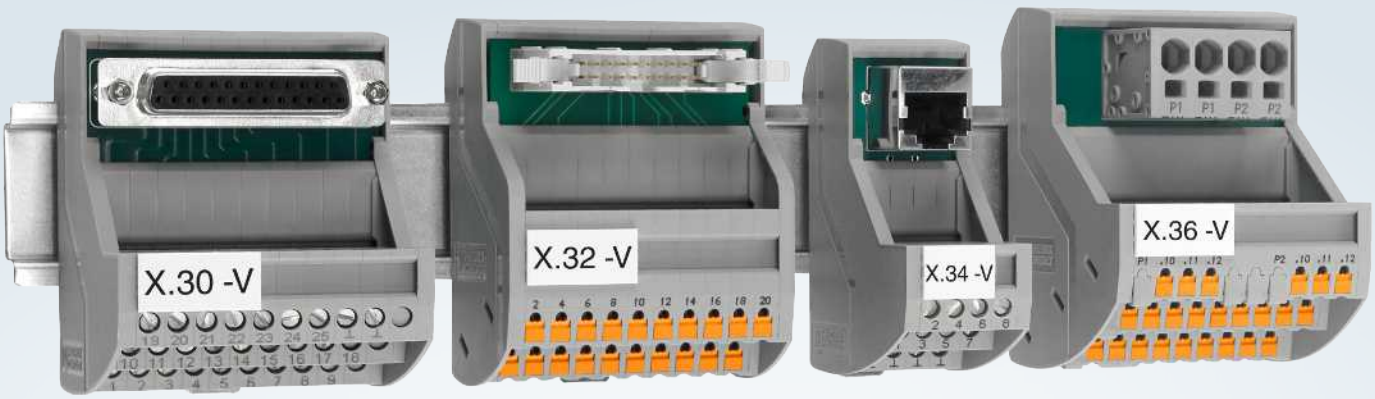
VARIOFACE V8 adapters

The plug-in connection for relay modules

More information starting on page 18

VARIOFACE Professional Universal termination boards

With our universal termination boards, you get a coordinated, modular, and robust system for optimum connection between control level and field level. They can be used in any application and enable the implementation of space-saving connections. Modules for signal transmission and potential distribution are available, depending on the application. Wherever connectors need to be connected with single-core wires, termination boards are the perfect solution.



Your advantages

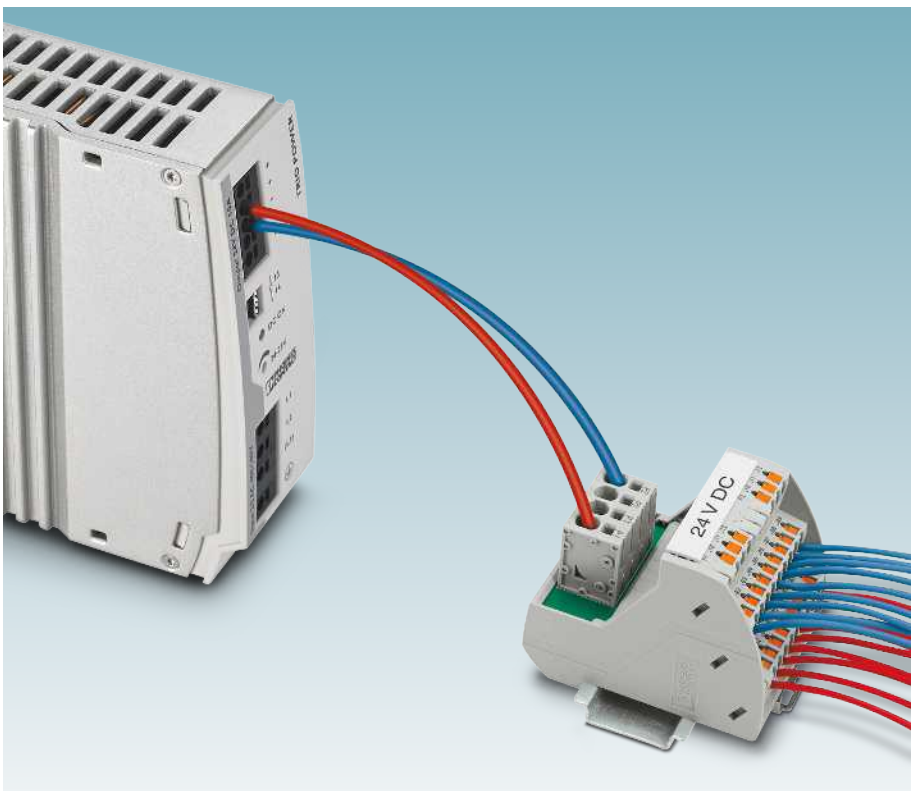
- ☑ Universal modules for all common numbers of positions, with screw or Push-in connection technology
- ☑ Easy handling due to the metal foot for DIN rail mounting
- ☑ Modules can be precisely defined due to variable marking

VARIOFACE Professional product portfolio

Modules for connectors with Push-in or screw connections		
		
IDC/FLK connectors	**D-SUB connectors**	**HD-SUB connectors**
Termination boards with 1:1 connection for mounting on NS 35 DIN rails		
		
RJ45 connectors	**D-SUB connectors**	**IDC/FLK and D-SUB connectors**
Termination boards with 1:1 connection for mounting on NS 35 DIN rails	Feed-through modules with 1:1 connection	Controller-specific modules (starting on page 36)

VARIOFACE potential distributors

Whether for operating voltage distribution or control voltage distribution, VARIOFACE potential distributors are rated up to 250 V/30 A, and can therefore be used in many different applications. They enable the simple and precise distribution of electrical signals in a small amount of space.



Potential distributor connection to a power supply

Selection of VARIOFACE Professional modules

VARIOFACE Professional modules				
With IDC/FLK pin strip				
				
	2 levels		3 levels	
Number of positions	**Push-in connection**	**Screw connection**	**Push-in connection**	**Screw connection**
10-pos.	2903787	2315010		
14-pos.	2903788	2315023		
16-pos.	2903789	2315036		
20-pos.	2903790	2315049		
26-pos.			2903791	2315052
34-pos.			2903792	2315065
40-pos.			2903793	2315078
50-pos.			2903794	2315081
60-pos.			2903795	2315094
64-pos.			2903796	2315104

Selection of VARIOFACE Professional modules

VARIOFACE Professional modules

With D-SUB pin strip






	2 levels		3 levels	
Number of positions	**Push-in connection**	**Screw connection**	**Push-in connection**	**Screw connection**
9-pos.	2903777	2315117		
15-pos.	2903779	2315120		
25-pos.			2903781	2315133
37-pos.			2903783	2315146
50-pos.			2903785	2315159

With D-SUB female strip






	2 levels		3 levels	
Number of positions	**Push-in connection**	**Screw connection**	**Push-in connection**	**Screw connection**
9-pos.	2903778	2315162		
15-pos.	2903780	2315175		
25-pos.			2903782	2315188
37-pos.			2903784	2315191
50-pos.			2903786	2315201

Selection of VARIOFACE Professional modules

VARIOFACE Professional modules

With high-density D-SUB pin strip

				
			3 levels	
Number of positions			**Push-in connection**	**Screw connection**
26-pos.			2904269	2322375
44-pos.			2904270	2322388
62-pos.			2904271	2322391

With high-density D-SUB female strip

				
	2 levels		3 levels	
Number of positions	**Push-in connection**	**Screw connection**	**Push-in connection**	**Screw connection**
15-pos.	2904272	2322401		
26-pos.			2904273	2322414
44-pos.			2904274	2322427
62-pos.			2904275	2322430

VARIOFACE Professional modules

With RJ45 connector

				
			3 levels	
Number of positions			**Push-in connection**	**Screw connection**
8-pos.			2904290	2900701

Selection of VARIOFACE Professional modules

Potential distributors

			
	2 levels	3 levels	2 levels, with fuse
Feed-in	**Screw connection**	**Push-in connection**	
2x feed-in / 8x distribution	2315256	2903797	2903603
2x feed-in / 12x distribution	2315269	2903798	
2x feed-in / 16x distribution	2315272	2903799	
2x feed-in / 24x distribution	2903717	2903800	

UMK modules

With ELCO connector

		
	Pin strip 8016 left	Pin strip 8016 right
Number of positions	**Screw connection**	**Screw connection**
38-pos.	2976284	2976297
56-pos.	2975890	2975900

Feed-through modules

				
	With D-SUB pin strip		With D-SUB female strip	
Number of positions	**Push-in spring connection**	**Screw connection**	**Push-in spring connection**	**Screw connection**
9-pos.	2903052	2283870	2903063	2287135
15-pos.	2903054	2280297	2903065	2280307
25-pos.	2903055	2280310	2903067	2280323
37-pos.	2903056	2280336	2903069	2280349
50-pos.	2903058	2291286	2903070	2287669

VARIOFACE Front Connect
Termination boards with front connections

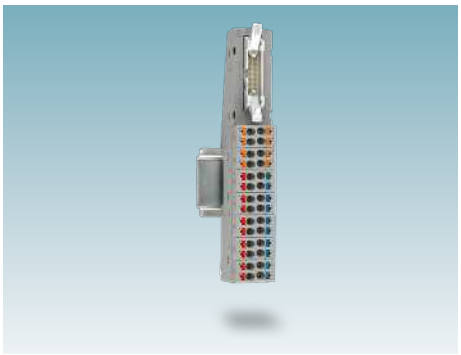
The new generation of ultra-compact termination boards is the perfect addition between the remote I/O system and the field level. An innovative design ensures fast and error-free wiring as well as space savings in the control cabinet. VARIOFACE Front Connect ideally supports decentralized peripherals with high flexibility and a narrow design.



Your advantages

- Fast, clear, and error-free wiring thanks to Push-in terminal blocks with front connection technology
- Up to 60% less space required in the control cabinet thanks to the innovative design with a 19 mm overall width
- Plug-and-play connection to the remote I/O level and field level with a comprehensive system cabling range

Remote I/O systems perfectly extended



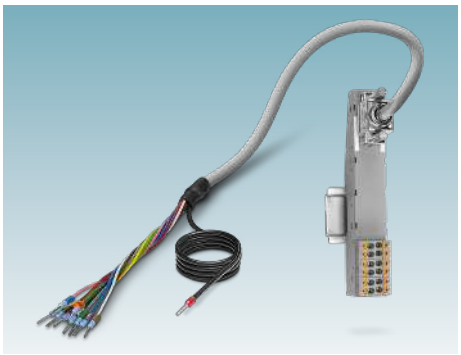
Practical solution

Easy handling and intuitive wiring thanks to clear marking and colored push buttons.



Engineering support

Easy planning and documentation thanks to available CAD data and EPLAN macros.

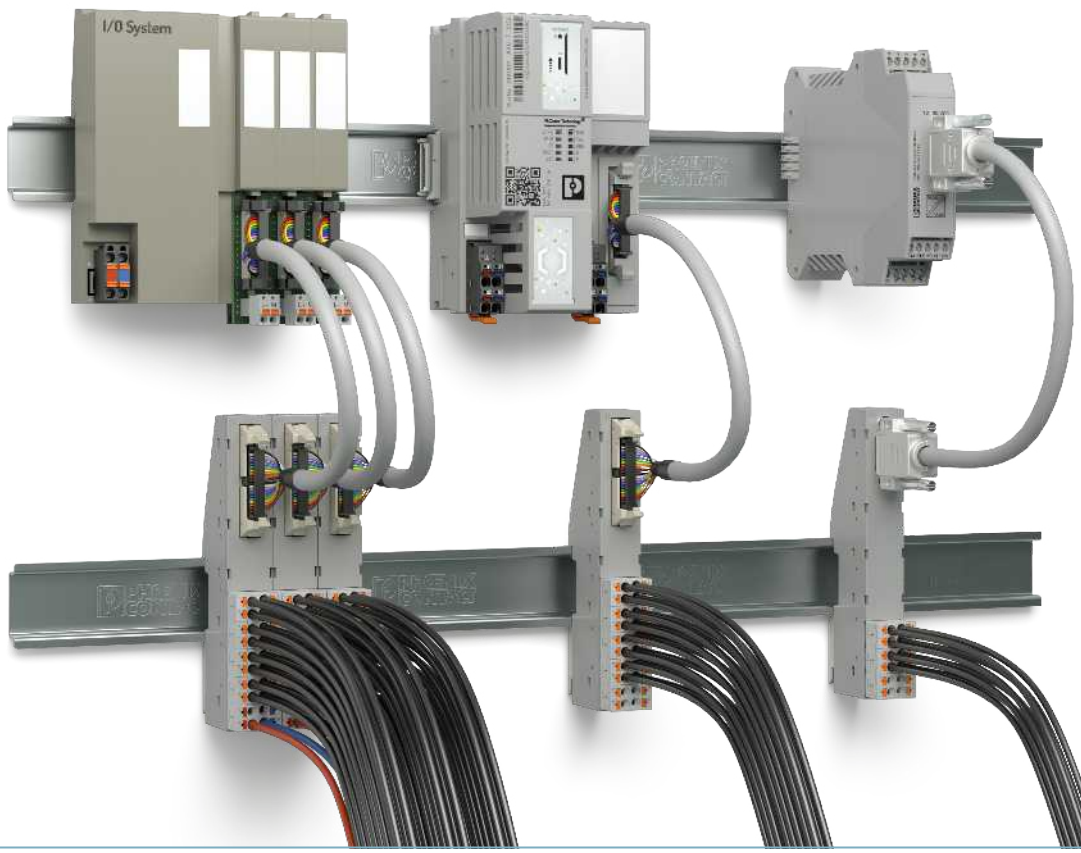


Accessories

Tailored accessories such as system cables with free cable end for universal connections.

VARIOFACE system cabling

Suitable for all common I/O systems: With the simple plug-in components, especially the new VARIOFACE Front Connect generation of termination boards, you can make time savings of up to 90% and space savings of up to 60% in comparison with conventional solutions.



Selection of VARIOFACE Front Connect modules

VARIOFACE Front Connect modules					
	Universal modules			System cabling	
					
	1:1 connection			Siemens SIMATIC® ET 200SP	8 channels with 20 +/- terminals
Number of positions	**D-SUB female strip**	**D-SUB pin strip**	**IDC/FLK pin strip**	**IDC/FLK pin strip**	**IDC/FLK pin strip**
9-pos.	1278826	1278825			
14-pos.			1278799		1278798
15-pos.	1278824	1278800			
16-pos.			1278796		
20-pos.			1278794	1278788	

VARIOFACE PLC-V8 adapters
The plug-in connection for relay modules

The system cabling adapter enables fast and error-free connection of relay modules to the control level. This solution combines the product features of PLC-INTERFACE and VARIOFACE system cabling. Depending on the switching requirement, the input and output block allows channel-specific assembly due to the modular design.





Your advantages

- Quick and easy connection of the coupling level and controller, as single-core wiring is no longer necessary
- High flexibility, as the modular design enables channel-specific assembly
- Sensor and actuator series enable direct connection of supply and return conductors

Efficient wiring solution with VARIOFACE PLC-V8 adapters

Efficient wiring between control level and interface level

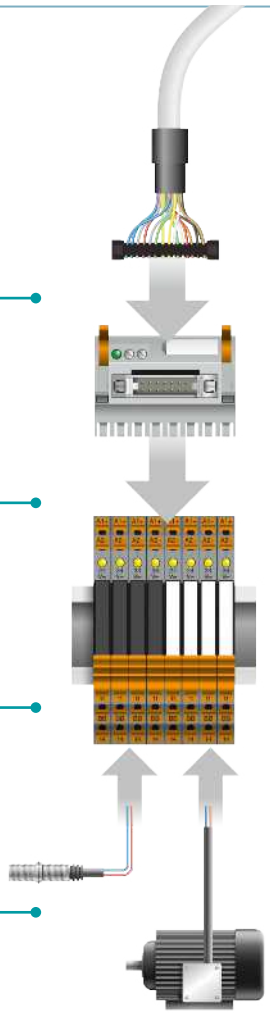
The PLC-V8 adapters are simply plugged into eight adjacent PLC-INTERFACE relays. This enables relays to be connected to I/O cards quickly and without errors via the PLC-V8 adapters with IDC/FLK or D-SUB connectors.

Assembled system cables coming from the controller are plugged into the PLC-V8 adapters

The PLC-V8 adapters are simply plugged into the bridge shafts of the PLC-INTERFACE relays

The PLC-INTERFACE relays form the coupling level between control level and field level

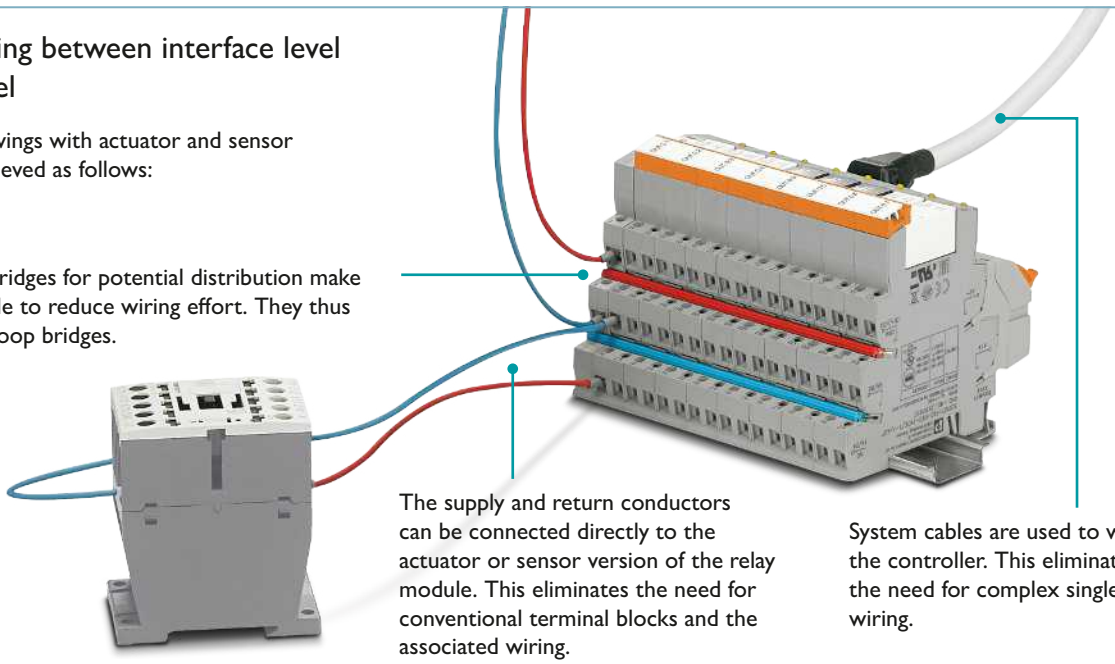
Sensors and actuators of the field level



Efficient wiring between interface level and field level

The potential savings with actuator and sensor versions are achieved as follows:

Plug-in bridges for potential distribution make it possible to reduce wiring effort. They thus replace loop bridges.



The supply and return conductors can be connected directly to the actuator or sensor version of the relay module. This eliminates the need for conventional terminal blocks and the associated wiring.

System cables are used to wire the controller. This eliminates the need for complex single-core wiring.

Selection of VARIOFACE PLC-V8 adapters

VARIOFACE PLC-V8 adapters, plug-in connection for relay modules

V8 adapters

	Relay series	Connection	Function	Polarity	Item no.
	PLC-INTERFACE (6.2 mm)	IDC/FLK pin strip	Output	Positive switching	2295554
				Negative switching	2304102
			Input	Positive switching	2296553
				Negative switching	2304115
		D-SUB female strip	Output	Positive switching	2296061
			Input		2296087
		D-SUB pin strip	Output		2296058
			Input		2296074
	PLC-INTERFACE (14 mm)	IDC/FLK pin strip	Output		2299660
				Negative switching	2304306
		D-SUB pin strip		Positive switching	1104789
	RIFLINE complete (16 mm)	IDC/FLK pin strip			2905195

PLC-INTERFACE 6.2 mm input

	Description	Push-in connection	Screw connection
	PLC-INTERFACE for input functions, consisting of basic terminal block and plug-in miniature relay with multi-layer gold contact, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input voltage: 120 V AC/110 V DC	2900314	2966320
	PLC-INTERFACE for input functions, consisting of basic terminal block and plug-in miniature relay with multi-layer gold contact, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input voltage: 230 V AC/220 V DC	2900315	2966333
	PLC-INTERFACE for input functions, consisting of basic terminal block and plug-in miniature relay with multi-layer gold contact, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input voltage: 24 V DC	2900313	2966317
	PLC-INTERFACE for input functions, consisting of basic terminal block and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input: 120 V AC/110 V DC, output: 3 ... 48 V DC/100 mA	2900359	2966799
	PLC-INTERFACE for input functions, consisting of basic terminal block and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input: 230 V AC/220 V DC, output: 3 ... 48 V DC/100 mA	2900361	2966809
	PLC-INTERFACE for input functions, consisting of basic terminal block and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input: 24 V DC, output: 3 ... 48 V DC/100 mA	2900358	2966773

Selection of VARIOFACE PLC-V8 adapters

PLC-INTERFACE 6.2 mm output			
	Description	**Push-in connection**	**Screw connection**
	PLC-INTERFACE for output functions, consisting of basic terminal block and plug-in miniature relay with power contact, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input voltage: 24 V DC	2900312	2966210
	PLC-INTERFACE, consisting of basic terminal block and plug-in miniature relay with power contact, for mounting on NS 35/7,5 DIN rail, 1 changeover contact, input voltage: 24 V DC	2900299	2966171
	PLC-INTERFACE for output functions, consisting of basic terminal block and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A	2900376	2966676
	PLC-INTERFACE, consisting of basic terminal block and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input: 24 V DC, output: 24 ... 253 V AC/0.75 A	2900369	2967840
	PLC-INTERFACE, consisting of basic terminal block and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A	2900364	2966634

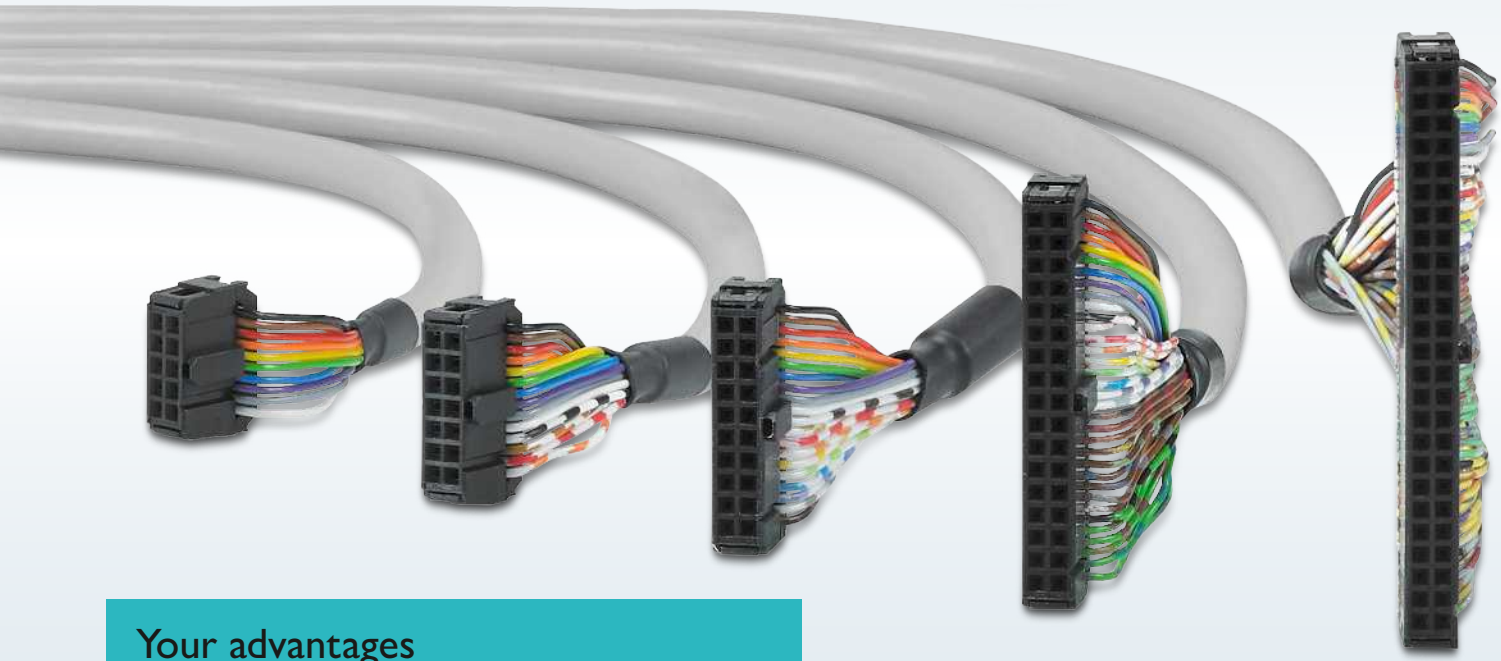
PLC-INTERFACE 14 mm output			
	Description	**Push-in connection**	**Screw connection**
	PLC-INTERFACE for high continuous currents, consisting of basic terminal block and plug-in miniature relay, for mounting on NS 35/7,5 DIN rail, limiting continuous current up to 10 A, 1 changeover contact, input voltage: 24 V DC	2900291	2967620
	PLC-INTERFACE for high inrush currents, consisting of basic terminal block and plug-in miniature relay, for mounting on NS 35/7,5 DIN rail, max. inrush current up to 800 A, 1 N/O contact, input voltage: 24 V DC	1078683	1078680
	PLC-INTERFACE, consisting of basic terminal block and plug-in miniature relay with power contact, for mounting on NS 35/7,5 DIN rail, 2 changeover contacts, input voltage: 24 V DC	2900330	2967060
	PLC-INTERFACE for output functions, consisting of basic terminal block and plug-in miniature solid-state relay, for mounting on NS 35/7,5 DIN rail, 1 N/O contact, input: 24 V DC, output: 3 … 33 V DC/5 A	1194158	2982786

RIFLINE complete output			
	Description	**Push-in connection**	**Screw connection**
	Preassembled relay module, consisting of: relay base, power contact relay, plug-in display/interference suppression module, and retaining bracket. Contact type: 1 changeover contact. Input voltage: 24 V DC	2903342	2903358
	Preassembled relay module, consisting of: relay base, power contact relay, plug-in display/interference suppression module, and retaining bracket. Contact type: 2 changeover contacts. Input voltage: 24 V DC	2903334	2903350
	Preassembled relay module, consisting of: relay base, multi-layer contact relay, plug-in display/interference suppression module, and retaining bracket. Contact type: 1 changeover contact. Input voltage: 24 V DC	2903338	2903354
	Preassembled relay module, consisting of: relay base, multi-layer contact relay, plug-in display/interference suppression module, and retaining bracket. Contact type: 2 changeover contacts. Input voltage: 24 V DC	2903330	2903346

System cables – assembled cables for quick plug-in connections

2

System cables with D-SUB or IDC/FLK connectors provide a quick and error-free connection between the automation device and termination board. Choose from a wide range of preassembled system cables in various numbers of positions. They can be connected using pin strips or female strips – optionally via single-core wires (free cable end with ferrules).



Your advantages

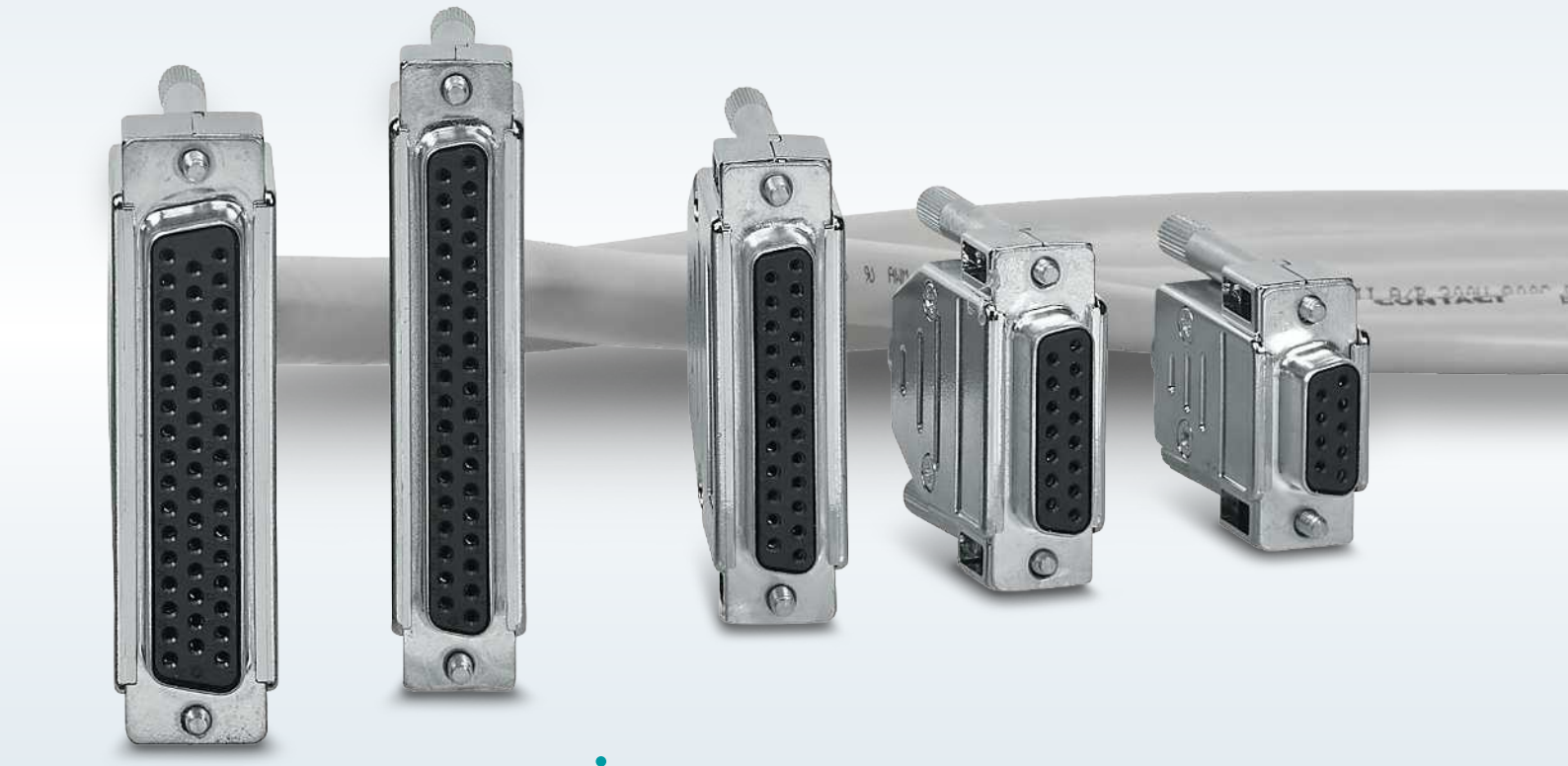
- ☑ Outstanding service: standard lengths from 0.5 to 10 m as well as custom lengths
- ☑ High current carrying capacity due to the large conductor cross-section of each single-core wire
- ☑ Flexible due to free cable end with single-core wire marking
- ☑ PVC for standard applications, alternatively halogen-free versions for increased fire protection requirements

IDC/FLK connectors

Preassembled system cables in various numbers of positions up to 1 A per conductor.

More information starting on page 24

			VARIOFACE system cable with IDC/FLK connector	VARIOFACE system cable with D-SUB connector
Conductor cross-section			0.14 mm²	0.25 mm²
Max. current per conductor			1 A	2 A
PVC cable	Unshielded	Connector at both ends	Number of positions: 10, 14, 16, 20, 26, 34, 40, 50	
		Connector at one end; free cable end at the other end	Number of positions: 10, 14, 16, 20, 50	
	Shielded	Connector at both ends	Number of positions: 14, 16, 40, 50	Number of positions: 9, 15, 25, 37, 50
		Connector at one end; free cable end at the other end		Number of positions: 9, 15, 25, 37, 50
Halogen-free cable	Unshielded	Connector at both ends	Number of positions: 14, 50	
	Shielded	Connector at both ends		Number of positions: 9, 15, 25, 37, 50



D-SUB connectors

Preassembled system cables in various numbers of positions up to 2 A per conductor.

More information starting on page 24

System cables

High flexibility and tailored lengths

VARIOFACE system cables with D-SUB or IDC/FLK connectors are available in various standard and freely configurable lengths. They can be connected using pin strips or female strips, or optionally via single-core wires with clear color coding and numbering.

Custom or standard cable lengths

Standard lengths:
1.0 m, 2.0 m, etc.

Custom lengths: choose from 0.2 m to 100.0 m

D-SUB connectors
Versions:
- Female strip to pin strip
- Female strip to female strip
- Pin strip to pin strip

Number of positions: 9, 15, 25, 37, 50





D-SUB connectors
Conductor cross-section per wire: 0.25 mm²
Current carrying capacity per wire: 2 A

IDC/FLK connectors
Versions:
- Female strip to female strip

Number of positions: 10, 14, 16, 20, 26, 34, 40, 50





IDC/FLK connectors
Conductor cross-section per wire: 0.14 mm²
Current carrying capacity per wire: 1 A

D-SUB connectors
Versions:
- Female strip to free cable end
- Pin strip to free cable end

Number of positions: 9, 15, 25, 37, 50





IDC/FLK connectors
Versions:
- Female strip to free cable end

Number of positions: 10, 14, 16, 20, 50

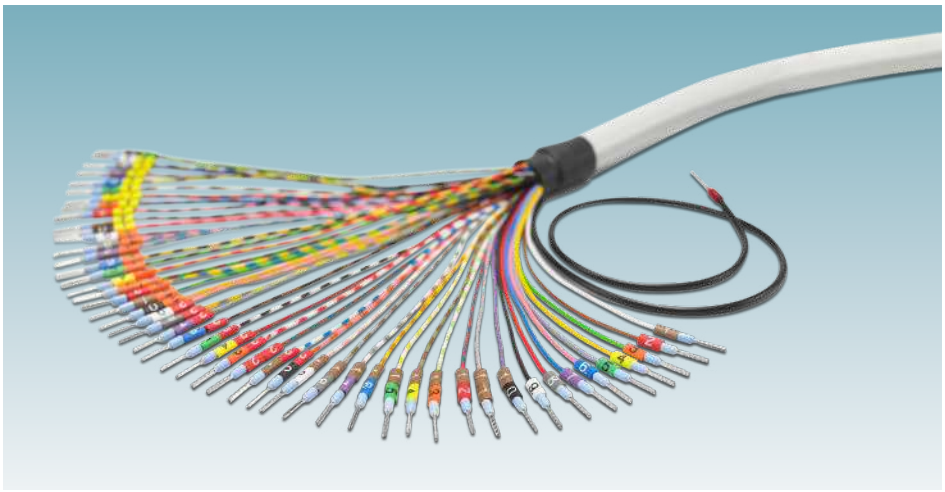




Flexible due to free cable end with single-core wire marking

Clear assignment

Universal system cables with direct wire assignment, thanks to clear color coding and numbering.



Single-core wires with color coding system

Color coding system for single-core wires in detail

Clear color assignment of units and tens with the simple color coding system featuring numbering.

Connectors		IDC/FLK	D-SUB
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		9-pos.
1	0	10-pos.	
1	1		
1	2		
1	3		
1	4	14-pos.	
1	5		15-pos.
1	6	16-pos.	
1	7		
1	8		
1	9		
2	0	20-pos.	
2	1		
2	2		
2	3		
2	4		
2	5		25-pos.

Connectors		IDC/FLK	D-SUB
2	6		
2	7		
2	8		
2	9		
3	0		
3	1		
3	2		
3	3		
3	4		
3	5		
3	6		
3	7		37-pos.
3	8		
3	9		
4	0		
4	1		
4	2		
4	3		
4	4		
4	5		
4	6		
4	7		
4	8		
4	9		
5	0	50-pos.	50-pos.

Selection of system cables

System cables with IDC/FLK female strip

Unshielded, free end at one end







CABLE-FLK*/OE/*/*

Cable length	10-pos.	14-pos.	16-pos.	20-pos.	50-pos.
0.5 m	2904073	2305761	2318127	2305826	2305871
1 m		2305253	2318130	2305305	2305350
1.5 m	2904075	2305266	2318143	2305318	2305363
2 m	2904076	2305279	2318156	2305321	2305376
2.5 m	2904077	2305282		2305334	2305389
3 m	2904078	2305295	2318172	2305347	2305392
4 m		2305774	2318185	2305839	2305884
6 m	2904080	2305787	2318198	2305842	2305897
8 m		2305790	2318208	2305855	2305907
10 m		2305800	2318211	2305868	2305910
Variable	2904331	2305732	2318224	2305745	2305758

Unshielded, female strip at both ends










FLK*/EZ-DR/*KONFEK

Cable length	10-pos.	14-pos.	16-pos.	20-pos.	26-pos.	34-pos.	40-pos.	50-pos.
0.5 m	2299204	2288901	2299291	2296391	2299385	2299479	2288985	2289065
1 m	2299217	2288914	2299301	2296401	2299398	2299482	2288998	2289078
1.5 m	2299220	2288927	2299314	2296472	2299408	2299495	2289007	2289081
2 m	2299233	2288930	2299327	2296485	2299411	2299505	2289010	2289094
2.5 m		2288943					2289023	2289104
3 m	2299246	2288956	2299330	2296498	2299424	2299518	2289036	2289117
3.5 m		2288969					2289049	2289120
4 m	2299259	2288972	2299343	2296508	2299437	2299521	2289052	2289133
6 m	2299262	2290863	2299356	2296511	2299440	2299534	2299589	2289609
8 m	2299275	2299563	2299369	2296524	2299453	2299547	2299592	2289641
10 m		2299576	2299372	2296537	2299466	2299550	2299602	2289683
Variable	2295059							

Selection of system cables

System cables with IDC/FLK female strip				
	Shielded, female strip at both ends		Halogen-free, unshielded, female strip at both ends	
				
	FLK*/EZ-DR/*/KONFEK/S		FLK*/EZ-DR/HF/*/KONFEK	CABLE-FLK*/*/HF/*
Cable length	**14-pos.**	**50-pos.**	**14-pos.**	**50-pos.**
0.5 m	2296977	2299097	2305952	2314134
1 m	2296980	2299107	2305965	2314147
1.5 m	2296993	2299110	2305978	2314150
2 m	2297002	2299123	2305981	2314163
2.5 m			2305994	2314176
3 m	2299013	2299136	2304759	2314189
4 m	2299026	2299149	2304762	2314192
6 m	2299039	2299152	2306003	
8 m	2299042			
10 m	2299055	2299178		2314244
Variable	2295046		2314040	2314257

Selection of system cables

System cables with D-SUB female strip and pin strip

Female strip at one end and pin strip at the other end







CABLE-D*SUB/B/S/*/KONFEK/S

Cable length	9-pos.	15-pos.	25-pos.	37-pos.	50-pos.
0.5 m	2299987	2302052	2302120	2302191	2302269
1 m	2299990	2302065	2302133	2302201	2302272
1.5 m	2300009	2302078	2302146	2302214	2302285
2 m	2302010	2302081	2302159	2302227	2302298
3 m	2302023	2302094	2302162	2302230	2302308
4 m	2302036	2302104	2302175	2302243	2302311
6 m	2302049	2302117	2302188	2302256	2302324
Variable	2302340				

Female strip at both ends







CABLE-D*SUB/B/B/*/KONFEK/S

Cable length	9-pos.	15-pos.	25-pos.	37-pos.	50-pos.
1 m	2305415	2305444	2305473	2305509	2305541
2 m	2305428	2305457	2305486	2305512	2305554
3 m	2305431	2305460	2305499	2305525	2305567
4 m				2900759	
6 m				2900760	
8 m				2900761	
10 m				2900762	
15 m				2900763	
20 m				2900764	
Variable	2302421				

Pin strip at both ends







CABLE-D*SUB/S/S/*/KONFEK/S

Cable length	9-pos.	15-pos.	25-pos.	37-pos.	50-pos.
1 m	2305570	2305606	2305635	2305664	2305693
2 m	2305583	2305619	2305648	2305677	2305703
3 m	2305596	2305622	2305651	2305680	2305716
Variable	2302434				

Selection of system cables

System cables with D-SUB female strip and pin strip

	Female strip at one end and pin strip at the other end, halogen-free				
					
	CABLE-D*SUB/B/S/HF/S/*				
Cable length	**9-pos.**	**15-pos.**	**25-pos.**	**37-pos.**	**50-pos.**
1 m	1066591	1066600	1066665	1066608	1066678
2 m	1066592	1066602	1066666	1066609	1066679
3 m	1066593	1066603	1066667	1066611	1066681
Variable	1075568	1075565	1075559	1075562	1075554
	Female strip at both ends, halogen-free				
					
	CABLE-D*SUB/B/B/HF/S/*				
Cable length	**9-pos.**	**15-pos.**	**25-pos.**	**37-pos.**	**50-pos.**
1 m	1066587	1066597	1066657	2908516	1066672
2 m	1066588	1066598	1066660	2908517	1066673
3 m	1066589	1066599	1066664	2908518	1066674
Variable	1075569	1075566	1075560	1075563	1075557
	Pin strip at both ends, halogen-free				
					
	CABLE-D*SUB/S/S/HF/S/*				
Cable length	**9-pos.**	**15-pos.**	**25-pos.**	**37-pos.**	**50-pos.**
1 m	1066594	1066604	1066668	1066612	1066682
2 m	1066595	1066606	1066669	1066614	1066683
3 m	1066596	1066607	1066671	1066615	1066684
Variable	1075567	1075564	1075558	1075561	1075553

Selection of system cables

System cables with D-SUB female strip and pin strip					
	Female strip at one end and free end at the other end				
					
	CABLE-D-*SUB/F/OE/*/S/*				
Cable length	**9-pos.**	**15-pos.**	**25-pos.**	**37-pos.**	**50-pos.**
0.5 m	2926014	2926085	2926153	2926221	2926292
1 m	2926027	2926098	2926166	2926234	2926302
1.5 m	2926030	2926108	2926179	2926247	2926315
2 m	2926043	2926111	2926182	2926250	2926328
3 m	2926056	2926124	2926195	2926263	2926331
4 m	2926069	2926137	2926205	2926276	2926344
6 m	2926072	2926140	2926218	2926289	2926357
Variable	2900903	2900905	2900906	2900907	2900908
	Pin strip at one end and free end at the other end				
					
	CABLE-D-*SUB/M/OE/*/S/*				
Cable length	**9-pos.**	**15-pos.**	**25-pos.**	**37-pos.**	**50-pos.**
0.5 m	2926360	2926438	2926506	2926577	2926645
1 m	2926373	2926441	2926519	2926580	2926658
1.5 m	2926386	2926454	2926522	2926593	2926661
2 m	2926399	2926467	2926535	2926603	2926674
3 m	2926409	2926470	2926548	2926616	2926687
4 m	2926412	2926483	2926551	2926629	2926690
6 m	2926425	2926496	2926564	2926632	2926700
Variable	2900909	2900910	2900911	2900912	2900913

3

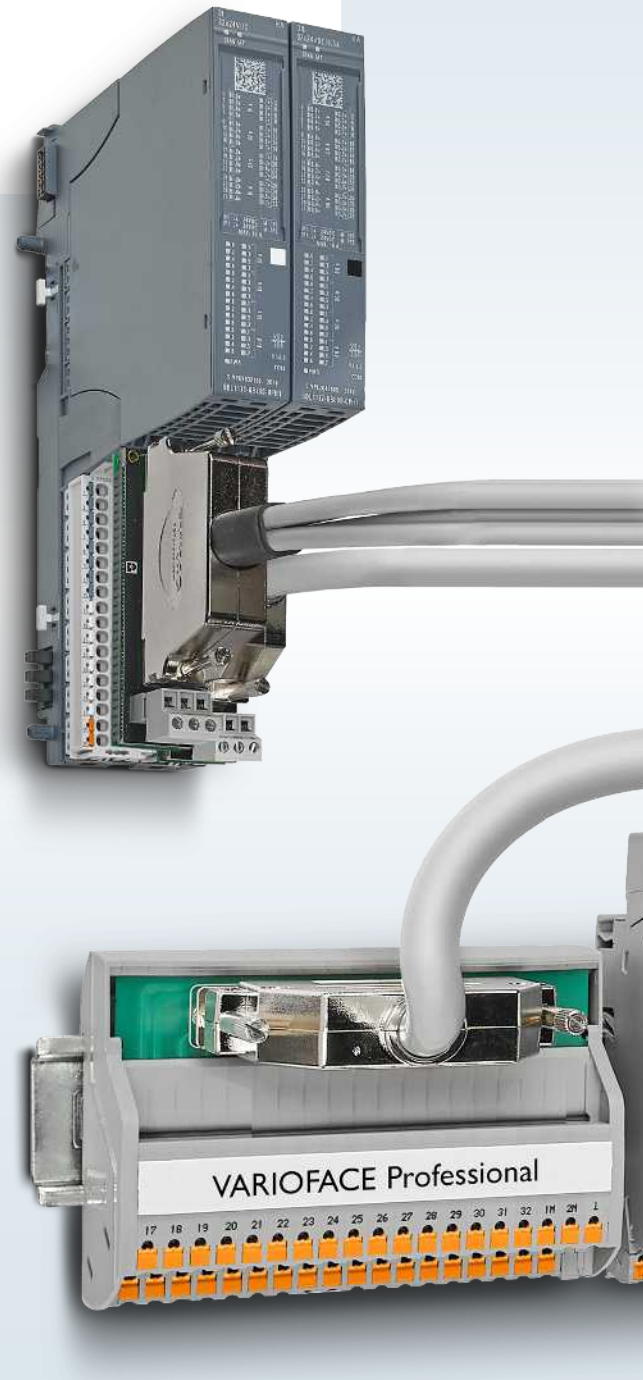
Controller-specific system cabling
Front adapter instead of single-core wiring

The front adapter marshals the signals, thus eliminating the need for complex single-core wiring. Simply plug the adapter into the correct input/output card of the controller. Preassembled system cables in all lengths and VARIOFACE termination boards complement the system.

Tailored front adapters

The front adapter features a high-position connector for transmitting signals. System cables and termination boards complement the VARIOFACE system concept here.

More information starting on page 34



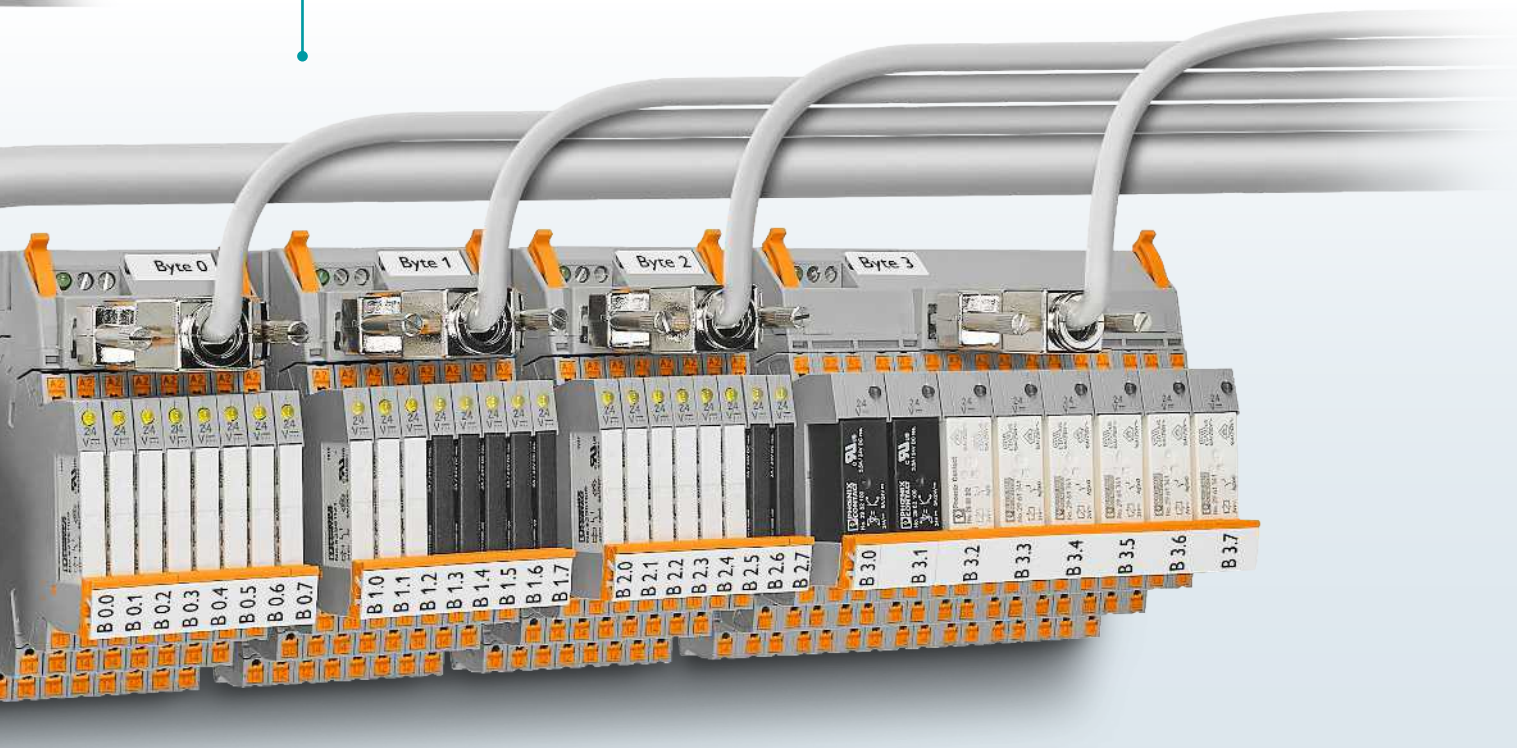
Your advantages

- ☑ Clear overview and time savings with the plug-and-play concept
- ☑ Error-free wiring, with pretested system cables
- ☑ High connection flexibility via front adapter, directly to the connector or free cable end

Interface level

The signals are transmitted from the controller to the modules via preassembled system cables. Different versions are available depending on length, number of positions, and shielding. The termination boards transmit the control and field signals. You also benefit from our varied product range in this case.

More information starting on page 34



Controller-specific system cabling

Tailored for your I/O card

Our controller-specific system cabling was specially developed to allow quick, error-free connection to the I/O modules of a wide range of controllers. The easy to plug-in front adapters, system cables, and termination boards provide time savings of up to 90% compared to conventional wiring with single-core cables. VARIOFACE system cabling is available for all common I/O systems.





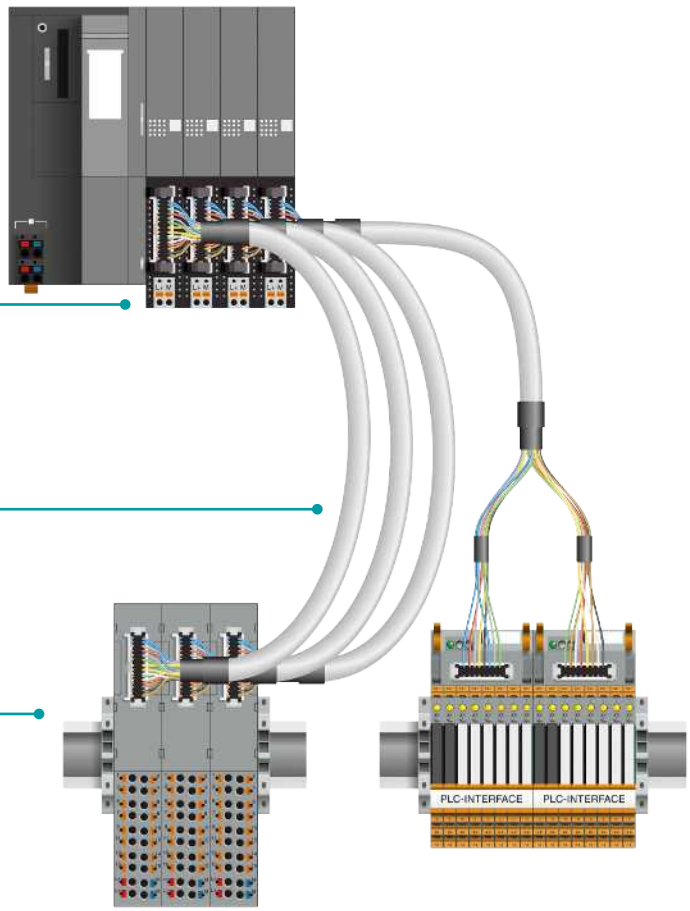
Your advantages

- Fast, error-free, and clear wiring of I/O modules
- Wide range of different functions such as relay, solid-state relay, and feed-through connector
- Individual design with interface modules in single-, two-, or three-conductor connection technology
- Flexible to connect with Push-in or screw connection technology

Controller-specific system cabling

The time-saving plug-and-play concept between control level and field level

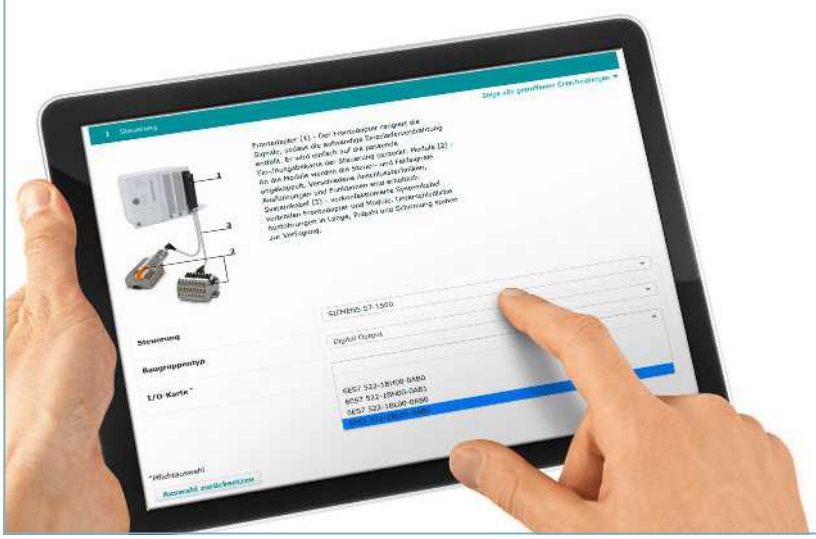
The VARIOFACE system cabling is a harmonized cabling concept consisting of the components front adapter, system cable, and termination board.



VARIOFACE front adapters are simply plugged into the respective I/O module.

VARIOFACE system cables in all lengths connect the front adapters to the termination boards.

VARIOFACE termination boards and PLC-V8 adapters for relays form the interface to the field-compatible single-core wire connection.



Configure products easily

The following overview pages enable you to quickly select the tailored system cabling components for your specific automation system.

For further solutions, simply use the configurator on our homepage.

Web code: #0007

VARIOFACE system cabling for ABB S800 I/O

ABB S800 I/O modules			System cables	Termination boards with screw (SC)
Web code: #0007			**Connection of I/O modules in row A: 1 x system cable, 2 x termination board or 2 x V8 adapter**	
Digital input modules DI 16X24VDC DI810 DI830 DI840 DI 32X24VDC DI818	A B			
Digital output modules DO 16X24VDC DO810 DO840 DO 32X24VDC DO818	A B	**A**	CABLE-D25SUB/B/2X14/…/TU812 1.0 m 2304649 2.0 m 2304652 3.0 m 2304665 5.0 m 2304678 Variable lengths 2304681/… Two system cables are required for 32-channel I/O modules with TU819.	**Termination boards for 8 DI or 8 DO:** VIP-2/PT/FLK14/PLC 2903801 (PT) VIP-2/SC/FLK14/PLC 2315214 (SC) **2-conductor connection for 8 DI:** VIP-2/PT/FLK14/8P/PLC 2904284 (PT) VIP-2/SC/FLK14/8P/PLC 2322294 (SC) **2-conductor connection for 8 DO:** VIP-2/PT/FLK14/8M/PLC 2904283 (PT) VIP-2/SC/FLK14/8M/PLC 2322281 (SC) **3-conductor connection for 8 DI or 8 DO:** VIP-3/PT/FLK14/8IM/PLC 2904282 (PT) VIP-3/SC/FLK14/8IM/PLC 2322278 (SC) Four termination boards are required for 32-channel I/O modules with TU819.
Analog input modules AI810 AI820 AI830 AI835 AI845	B			
Analog output modules AO810 AO820 AO845	B		**Connection of I/O modules in row B: 1 x system cable, 1 x termination board**	
The system cables are plugged directly into the Compact Module Termination Unit (MTU) TU812 (16 channels) or TU819 (32 channels) of the S800 I/O system.				
		B	CABLE-D25SUB/B/S/…/KONFEK/S 0.5 m 2302120 1.0 m 2302133 2.0 m 2302159 3.0 m 2302162 4.0 m 2302175 Variable lengths 2302340/25S/C36/… Two system cables are required for 32-channel I/O modules with TU819.	**1:1 termination board for digital and analog I/O modules** VIP-3/PT/D25SUB/F 2903782 (PT) VIP-3/SC/D25SUB/F 2315188 (SC) Two termination boards are required for 32-channel I/O modules with TU819.

or Push-in (PT) connections and V8 adapters for relays



Termination boards with 3-conductor connection technology for 8 DI or 8 DO
VFC-PT/FLK14/PLC 1278798 (PT)

Four termination boards are required for 32-channel I/O modules with TU819.



Termination board with knife-disconnect terminal blocks for 8 DI or 8 DO
FLKM 14/KDS3-MT/PPA/PLC 2290423 (SC)

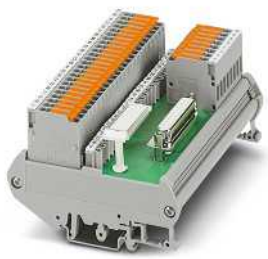
Four termination boards are required for 32-channel I/O modules with TU819.



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

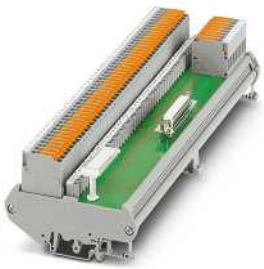
For selection of relays, see page 20/21

Four V8 adapters are required for 32-channel I/O modules with TU819.



Termination board for analog I/O modules with knife-disconnect terminal blocks and separate positive terminals
FLKM-D25 SUB/B/KDS3-MT/TU810/P 2304539 (SC)

Termination board for analog I/O modules with knife-disconnect terminal blocks and separate negative terminals
FLKM-D25 SUB/B/KDS3-MT/TU810 2304513 (SC)



Termination board for analog I/O modules with knife-disconnect terminal blocks and separate positive and negative terminals
FLKM-D25 SUB/B/KDS3-MT/TU830 2304526 (SC)

VARIOFACE system cabling for Allen Bradley ControlLogix 1756 I/O

Allen Bradley I/O modules	
Web code: #0007	
Digital input modules DI 16X24VDC 1756-IB16D 1756-IB16I 1756-IH16I Only with termination board 2904286 and 2322317 in row A	A1 C
Digital input modules DI 32X24VDC 1756-IB32	A2 C
Digital output modules DQ 16X24VDC 1756-OB16E	B C
Digital output modules DQ 32X24VDC 1756-OB32	A1 C
Analog input modules 1756-IF8 1756-IF16 1756-IF8H Only with termination board 2904286 and 2322317 in row A	A1 C
Analog input modules 1756-IA8D 1756-IF6I 1756-IR6I 1756-IT6I 1756-IF6CIS	B C
Analog output modules 1756-OF4 1756-OF6CI 1756-OF6VI 1756-OF8 1756-OF8H	B C

	Front adapters	System cables
A	**Connection of I/O modules in row A: 1 x front adapter, 1 x system cable, 1 x termination board**	
		
	A1:FLKM 50-PA-AB/1756/EXTC 2302735 A2:FLKM 50-PA-AB/1756/IN/EXTC 2302748	FLK 50/EZ-DR/…KONFEK 0.5 m 2289065 1.0 m 2289078 1.5 m 2289081 2.0 m 2289094 3.0 m 2289117 4.0 m 2289133 6.0 m 2289609 8.0 m 2289641 10.0 m 2289683 Variable lengths 2295059/50U/C38/…
B	**Connection of I/O modules in row B: 1 x front adapter, 2 x system cable, 2 x termination board**	
		
	FLKM 14-PA-AB/1756/EXTC 2302861	FLK 14/EZ-DR/…KONFEK 0.5 m 2288901 1.0 m 2288914 1.5 m 2288927 2.0 m 2288930 3.0 m 2288956 4.0 m 2288972 6.0 m 2290863 8.0 m 2299563 10.0 m 2299576 Variable lengths 2295059/14U/C23/…
C	**Universal front adapters with free cable end (AWG 18, 0.75 mm²)**	
		
	Universal front adapters (max. 250 V AC/DC, 3 A) for 20-pos. ControlLogix I/O modules	
	VIP-PA-PWR/20XOE/ …/1756 1.0 m 2908863 2.0 m 2908864 4.0 m 2908865 6.0 m 2908866	1756-IA16 1756-IB16 1756-OA16 1756-OA8 1756-OB16E 1756-OB8 1756-OF4 1756-OF8 1756-CFM 1756-IA8D 1756-IC16 1756-IG16 1756-IN16 1756-IV16 1756-OA8D 1756-OA8E 1756-OC8 1756-OF8H 1756-OG16 1756-ON8 1756-OV16E 1756-PLS

Termination boards with screw (SC) or Push-in (PT) connections and PLC-V8 adapters for relays



Termination boards for 32 DI or 32 DO:
VIP-2/PT/FLK50/PLC 2903803 (PT)
VIP-2/SC/FLK50/PLC 2315227 (SC)

Termination boards with ControlLogix-specific marking:
VIP-2/PT/FLK50/AB-1756
2904286 (PT)
VIP-2/SC/FLK50/AB-1756
2322317 (SC)



Term. board for 32 DO, separate "-" terminals for each channel
FLKM 50/32M/PLC 2289719 (SC)
Term. board for 32 DI, separate "+" terminals for each channel
FLKM 50/32P/PLC 2291121 (SC)
Term. board for 32 DO or 32 DI, separate "+" and "-" terminals for each channel
FLKM 50/32IM/PLC 2284523 (SC)
Term. board for 32 DO or 32 DI with knife-disconn. terminal
FLKM 50/KDS3-MT/PPA/PLC
2290614 (SC)



V8 adapters for PLC-INTERFACE
8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553



Matching cables for V8 adapters
FLK 50/4X14/EZ-DR/…/KONFEK

1.0 m	2296692
2.0 m	2296715
3.0 m	2296728
4.0 m	2296731
6.0 m	2296744
10.0 m	2296773
Variable lengths	2302405/…

or 2 x PLC-V8 adapter



Termination boards with ControlLogix-specific marking
VIP-2/PT/2FLK14/AB-1756
2904288 (PT)
VIP-2/SC/2FLK14/AB-1756
2322333 (SC)



Termination boards (8 DO) for 1756-OB16E:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection
VIP-2/PT/FLK14/8M/PLC
2904283 (PT)
VIP-2/SC/FLK14/8M/PLC
2322281 (SC)
3-conductor connection:
VIP-3/PT/FLK14/8IM/PLC
2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC
2322278 (SC)
3-conductor connection, narrow design
VFC-PT/FLK14/PLC 1278798 (PT)



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660

For selection of relays, see page 20/21



Universal front adapters (max. 250 V AC/DC, 3 A) for 36-pos. ControlLogix I/O modules

VIP-PA-PWR/36XOE/ …/1756

1.0 m	2908859
2.0 m	2908860
4.0 m	2908861
6.0 m	2908862

1756-IB16D
1756-IB16I
1756-IB32
1756-IF16
1756-IF8
1756-IF8I
1756-IRT8I
1756-OB16D
1756-OB16I
1756-OB32
1756-HSC
1756-IA16I

1756-IA32
1756-IB16IF
1756-IB16ISOE
1756-IF16H
1756-IF4FXOF2F
1756-IF8H
1756-IF8IH
1756-IH16I
1756-IH16ISOE
1756-IM16I
1756-IR12
1756-IT16

1756-LSC8XIB8I
1756-IV32
1756-OA16I
1756-OB16IEF
1756-OB16IEFS
1756-OB16IS
1756-OB8EI
1756-OF8I
1756-OF8IH
1756-OH8I
1756-OV32E
1756-OW16I
1756-OX8I

VARIOFACE system cabling for Honeywell C300

Honeywell C300 I/O modules	
Web code: #0007	
Digital input modules DI 16X24VDC TDIL01 (non-redundant) TDIL11 (redundant)	A1 A2 B
Digital input modules DI 32X24VDC TDIL51 (non-redundant) TDIL61 (redundant)	A1 B
Digital output modules DO16X24VDC TDOB01 (non-redundant) TDOB11 (redundant)	A1 A2 B
Digital output modules DO32X24VDC TDOD51 (non-redundant) TDOD61 (redundant)	A1 B
Analog input modules TAIX01 (non-redundant) TAIX11 (redundant) TAIX51 (non-redundant) TAIX61 (redundant) TAIN01 (non-redundant) TAIN11 (redundant)	A3
Analog input modules TAID01 (non-redundant) TAID11 (redundant)	A3 A4
Analog output modules TAOX51 (non-redundant) TAOX61 (redundant) TAON01 (non-redundant) TAON11 (redundant)	A1
Analog output modules TAOX01 (non-redundant) TAOX11 (redundant)	A3

A

Connection of I/O modules in row A: 1 (2) x front adapter, 1 (2) x system cable,





Front adapters for C300 I/O (1 x for 16 channels, 2 x for 32 channels)

A1: For DI/DO/AO
FLKM-PA-D37/HW/DIO/C300 2901423

A2: For DI/DO (TDIL01, TDOB01) with separate +/- connection
FLKM-PA-D37/HW/C300 2322029

A3: For AI/AO
FLKM-PA-D37/HW/AN/C300 2900622

A4: For AI (TAID01, TAID11) and TB1/TB2 connection
FLKM-PA-D37/HW/AN/C300/TAID/P 1081063

PVC
CABLE-D37SUB/B/B/…

1.0 m	2305509
2.0 m	2305512
3.0 m	2305525
4.0 m	2900759
6.0 m	2900760
8.0 m	2900761
10.0 m	2900762

Variable lengths 2302421/37S/C44/…

Halogen-free
CABLE-D37SUB/B/B/HF/S/…M

1.0 m	2908516
2.0 m	2908517
3.0 m	2908518
4.0 m	2908519
6.0 m	2908520
8.0 m	2908521
10.0 m	2908522

Variable lengths 1075563/…

B

Connection of I/O modules in row B: 1 (2) x front adapter, 1 (2) x system cable, 2 (4) x V8 adapter





Front adapters for C300 I/O (1 x for 16 channels, 2 x for 32 channels)

For DO:
FLKM-PA-2D15/HW/DO/C300 2900924

For DI:
FLKM-PA-2D15/HW/DI/C300 2901879

PVC
CABLE-D15SUB/B/B/…KONFEK/S

1.0 m	2305444
2.0 m	2305457
3.0 m	2305460

Variable lengths 2302421/15S/C29/…

Halogen-free
CABLE-D15SUB/B/B/HF/S/…M

1.0 m	1066657
2.0 m	1066660
3.0 m	1066664

Variable lengths 1075560/…

Termination boards with screw (SC) or Push-in (PT) connections and PLC-V8 adapters for relays

1 (2) x termination board



1:1 termination board with 2 levels, marking 1 … 37
VIP-2/PT/D37SUB/M 2904277 (PT)
VIP-2/SC/D37SUB/M 2900676 (SC)



Termination board with 2 levels, marking 1+, 2-, 3+, 4-, …, 31+, 32-
VIP-2/PT/D37SUB/M/SO 2904278 (PT)
VIP-2/SC/D37SUB/M/SO 2900786 (SC)



Termination board with 3 levels, marking adapted to TAOX01, TAOX11
VIP-3/PT/D37SUB/M/HW/C300 2904276 (PT)
VIP-3/SC/D37SUB/M/HW/C300 2900675 (SC)

for relay



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/D15S/OUT 2296058
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/D15S/IN 2296074

For selection of relays, see page 20/21



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/D15S/OUT 1104789

For selection of relays, see page 20/21

VARIOFACE system cabling for Phoenix Contact Axioline F

	Axioline F I/O modules	System cables
A	**Connection of I/O modules in row A: 1 x system cable, 1 x termination board**	
		
	AXL F DO16 FLK 1H 2701813	FLK 20/EZ-DR/ 50KONFEK 2296391 FLK 20/EZ-DR/ 100KONFEK 2296401 FLK 20/EZ-DR/ 150KONFEK 2296472 FLK 20/EZ-DR/ 200KONFEK 2296485 FLK 20/EZ-DR/ 300KONFEK 2296498 FLK 20/EZ-DR/ 400KONFEK 2296508 FLK 20/EZ-DR/ 600KONFEK 2296511 FLK 20/EZ-DR/ 800KONFEK 2296524 FLK 20/EZ-DR/1000KONFEK 2296537 Variable lengths 2295059/20U/C61/…
B	**Connection of I/O modules in row B: 1 x system cable, 2 x termination board or 2 x PLC-V8 adapter**	
		
	AXL F DO16 FLK 1H 2701813	FLK 20/2FLK14/EZ-DR/…/KONFEK 0.5 m 2305059 1.0 m 2298470 2.0 m 2298438 3.0 m 2300818 4.0 m 2305237 5.0 m 2902707 10.0 m 2902708 Variable lengths 2304487/…
C	**Connection of I/O modules in row C: 2 (4) x system cable, 2 (4) x termination board or 2 (4) x PLC-V8 adapter**	
		
	AXL F DI16/1 1H AXL F DI16/1 HS 1H AXL F DI32/1 1F AXL F DI32/1 2H AXL F DI32/1 XC 1F AXL F DI64/1 2F AXL F DO16/1 1H AXL F DO32/1 1F AXL F DO32/1 2H AXL F DO32/1 XC 1F	**System cables for 8 DI or 8 DO:** CABLE-FLK14/AXIO/OE/0,14/… 0.5 m 1369888 1.0 m 1369897 1.5 m 1369902 2.0 m 1369904 3.0 m 1369905 4.0 m 1369906 6.0 m 1369909

Termination boards with screw (SC) or Push-in (PT) connections		PLC-V8 adapters for relays
		Web code: #0007
		
Termination board with 20 connection terminal blocks (1 - 20): VIP-2/PT/FLK20 2903790 (PT) VIP-2/SC/FLK20 2315049 (SC)	**Termination board with 20 connection terminal blocks (1 - 20):** VFC-PT/FLK20 1278794 (PT) **Termination board with Siemens SIMATIC® ET 200SP-specific marking** VFC-PT/FLK20/ET200SP 1278788 (PT)	
		
Termination boards for 8 DI or 8 DO: VIP-2/PT/FLK14/PLC 2903801 (PT) VIP-2/SC/FLK14/PLC 2315214 (SC) **2-conductor connection for 8 DI:** VIP-2/PT/FLK14/8P/PLC 2904284 (PT) VIP-2/SC/FLK14/8P/PLC 2322294 (SC) **2-conductor connection for 8 DO:** VIP-2/PT/FLK14/8M/PLC 2904283 (PT) VIP-2/SC/FLK14/8M/PLC 2322281 (SC) **3-conductor connection for 8 DI or 8 DO:** VIP-3/PT/FLK14/8IM/PLC 2904282 (PT) VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)	**Termination boards with 3-conductor connection technology for 8 DI or 8 DO** VFC-PT/FLK14/PLC 1278798 (PT)	**V8 adapters for PLC-INTERFACE** **V8 adapter for 8 DO, 6.2 mm relay** PLC-V8/FLK14/OUT 2295554 **V8 adapter for 8 DO, 14 mm relay** PLC-V8L/FLK14/OUT 2299660 **V8 adapter for 8 DI, 6.2 mm relay** PLC-V8/FLK14/IN 2296553 For selection of relays, see page 20/21
		
Termination boards for 8 DI or 8 DO: VIP-2/PT/FLK14/PLC 2903801 (PT) VIP-2/SC/FLK14/PLC 2315214 (SC) **2-conductor connection for 8 DI:** VIP-2/PT/FLK14/8P/PLC 2904284 (PT) VIP-2/SC/FLK14/8P/PLC 2322294 (SC) **2-conductor connection for 8 DO:** VIP-2/PT/FLK14/8M/PLC 2904283 (PT) VIP-2/SC/FLK14/8M/PLC 2322281 (SC) **3-conductor connection for 8 DI or 8 DO:** VIP-3/PT/FLK14/8IM/PLC 2904282 (PT) VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)	**Termination boards with 3-conductor connection technology for 8 DI or 8 DO** VFC-PT/FLK14/PLC 1278798 (PT)	**V8 adapters for PLC-INTERFACE** **V8 adapter for 8 DO, 6.2 mm relay** PLC-V8/FLK14/OUT 2295554 **V8 adapter for 8 DO, 14 mm relay** PLC-V8L/FLK14/OUT 2299660 **V8 adapter for 8 DI, 6.2 mm relay** PLC-V8/FLK14/IN 2296553 For selection of relays, see page 20/21

VARIOFACE system cabling for Phoenix Contact Axioline Smart Elements

	Axioline Smart Elements I/O modules	System cables
	Connection of I/O modules in row A: 2 x system cable, 2 x termination board or 2 x PLC-V8 adapter	
		
A	AXL SE DI16/1 1088127 AXL SE DO16/1 1088129	**System cables for 8 DI or 8 DO:** CABLE-FLK14/AXIO/OE/0,14/… 0.5 m 1369888 1.0 m 1369897 1.5 m 1369902 2.0 m 1369904 3.0 m 1369905 4.0 m 1369906 6.0 m 1369909
	Connection of I/O modules in row B: 2 x system cable, 2 x termination board or 2 x PLC-V8 adapter	
		
B	AXL SE DI16/1 NPN 1105559 AXL SE DO16/1 NPN 1105560	**System cables for 8 DI or 8 DO:** CABLE-FLK14/AXIO/OE/0,14/… 0.5 m 1369888 1.0 m 1369897 1.5 m 1369902 2.0 m 1369904 3.0 m 1369905 4.0 m 1369906 6.0 m 1369909

Termination boards with screw (SC) or Push-in (PT) connections

PLC-V8 adapters for relays

Web code: #0007



Termination boards for 8 DI or 8 DO:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection for 8 DI:
VIP-2/PT/FLK14/8P/PLC 2904284 (PT)
VIP-2/SC/FLK14/8P/PLC 2322294 (SC)
2-conductor connection for 8 DO:
VIP-2/PT/FLK14/8M/PLC 2904283 (PT)
VIP-2/SC/FLK14/8M/PLC 2322281 (SC)
3-conductor connection for 8 DI or 8 DO:
VIP-3/PT/FLK14/8IM/PLC 2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)



Termination boards with 3-conductor connection technology for 8 DI or 8 DO
VFC-PT/FLK14/PLC 1278798 (PT)



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

For selection of relays, see page 20/21



Termination boards for 8 DI or 8 DO:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection for 8 DI:
VIP-2/PT/FLK14/8P/PLC 2904284 (PT)
VIP-2/SC/FLK14/8P/PLC 2322294 (SC)
2-conductor connection for 8 DO:
VIP-2/PT/FLK14/8M/PLC 2904283 (PT)
VIP-2/SC/FLK14/8M/PLC 2322281 (SC)
3-conductor connection for 8 DI or 8 DO:
VIP-3/PT/FLK14/8IM/PLC 2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)



Termination boards with 3-conductor connection technology for 8 DI or 8 DO
VFC-PT/FLK14/PLC 1278798 (PT)



Adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT/M 2304102
Adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT/M 2304306
Adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN/M 2304115

For selection of relays, see page 20/21

VARIOFACE system cabling for Schneider Electric Modicon X80 I/O for M340

Modicon X80 I/O			Front adapters	System cables
Web code: #0007				
Digital input modules DI 16X24VDC BMXDDI1602	A	A	**Connection of I/O modules in row A: 1 x front adapter, 2 x system cable, 2 x termination board**	
				
Digital input modules DI 32X24VDC BMXDDI3202K	B C		FLKM 14-PA-MODI/M340 2903208	FLK 14/EZ-DR/…KONFEK 0.5 m 2288901 1.0 m 2288914 1.5 m 2288927 2.0 m 2288930 3.0 m 2288956 4.0 m 2288972 6.0 m 2290863 8.0 m 2299563 10.0 m 2299576 Variable lengths 2295059/14U/C23/…
Digital input modules DI 64X24VDC BMXDDI6402K	B C	B	**Connection of I/O modules in row B: 1 (2) x system cable, 1 (2) x termination board**	
Digital output modules DQ 16X24VDC BMXDDO1602 BMXDDO1612 (negative logic)	A			**System cables for 32 channels** CABLE-FCN40/1X50/…/M340 0.5 m 2321635 1.0 m 2321648 2.0 m 2321651 3.0 m 2321664 4.0 m 2321677 6.0 m 2321680 8.0 m 2321693 10.0 m 2321703
Digital output modules DQ 32X24VDC BMXDDO3202K	B C		Note: A front adapter is not required for these I/O modules.	
Digital output modules DQ 64X24VDC BMXDDO6402K	B C	C	**Connection of I/O modules in row C: 1 (2) x system cable, 4 (8) x termination board**	
Digital input/output modules DI 16/DQ16X24VDC BMXDDM3202K	B C			**System cables for 32 channels** CABLE-FCN40/4X14/…/M340 0.5 m 2321716 1.0 m 2321729 2.0 m 2321732 3.0 m 2321745 4.0 m 2321758 6.0 m 2321761 8.0 m 2321774 10.0 m 2321787
			Note: A front adapter is not required for these I/O modules.	

Termination boards with screw (SC) or Push-in (PT) connections and V8 adapters for relays

or 2 x PLC-V8 adapter for relay



Termination boards for 8 DI or 8 DO:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection for 8 DI:
VIP-2/PT/FLK14/8P/PLC 2904284 (PT)
VIP-2/SC/FLK14/8P/PLC 2322294 (SC)
2-conductor connection for 8 DO:
VIP-2/PT/FLK14/8M/PLC 2904283 (PT)
VIP-2/SC/FLK14/8M/PLC 2322281 (SC)
3-conductor connection for 8 DI or 8 DO:
VIP-3/PT/FLK14/8IM/PLC 2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)



Termination boards with 3-conductor connection technology for 8 DI or 8 DO
VFC-PT/FLK14/PLC 1278798 (PT)



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

For BMXDDO1612 (negative logic):
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT/M 2304102
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT/M 2304306

For selection of relays, see page 20/21



Termination boards for 32 DI or 32 DO:
VIP-2/PT/FLK50/PLC 2903803 (PT)
VIP-2/SC/FLK50/PLC 2315227 (SC)



Termination board for 32 DO, separate negative terminals for each channel
FLKM 50/32M/PLC 2289719 (SC)
Termination board for 32 DI, separate positive terminals for each channel
FLKM 50/32P/PLC 2291121 (SC)
Termination board for 32 DO or 32 DI, separate positive and negative terminals for each channel
FLKM 50/32IM/PLC 2284523 (SC)
Termination board for 32 DO or 32 DI with knife-disconnect terminal blocks
FLKM 50/KDS3-MT/PPA/PLC 2290614 (SC)



Relay module for 32 DO, 1 N/O contact
UMK-32 RM/MR-G24/1/PLC 2979472 (SC)

or 4 (8) x PLC-V8 adapter for relay



Termination boards for 8 DI or 8 DO:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection for 8 DI:
VIP-2/PT/FLK14/8P/PLC 2904284 (PT)
VIP-2/SC/FLK14/8P/PLC 2322294 (SC)
2-conductor connection for 8 DO:
VIP-2/PT/FLK14/8M/PLC 2904283 (PT)
VIP-2/SC/FLK14/8M/PLC 2322281 (SC)
3-conductor connection for 8 DI or 8 DO:
VIP-3/PT/FLK14/8IM/PLC 2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)



Termination boards with 3-conductor connection technology for 8 DI or 8 DO
VFC-PT/FLK14/PLC 1278798 (PT)



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

For selection of relays, see page 20/21

VARIOFACE system cabling for Siemens SIMATIC ET 200SP

Siemens I/O modules			Front adapters	System cables
Web code: #0007				
Digital input modules DI 16X24VDC 6ES7131-6BH01-0BA0 6ES7131-6BH01-2BA0	A B	**A**	**Connection of I/O modules in row A: 1 x front adapter, 1 x system cable, 1 x termination board**	
				
			FLKM 20-PA-ET200SP 1099751	FLK 20/EZ-DR/…KONFEK 0.5 m 2296391 1.0 m 2296401 1.5 m 2296472 2.0 m 2296485 3.0 m 2296498 4.0 m 2296508 6.0 m 2296511 8.0 m 2296524 10.0 m 2296537 Variable lengths 2295059/20U/C61/…
Digital input modules DI 8X24VDC 6ES7131-6BF01-0BA0 6ES7131-6BF01-2BA0 6ES7131-6BF01-0AA0 6ES7131-6BF01-2AA0 6ES7131-6BF60-0AA0 6ES7131-6BF00-0CA0 6ES7131-6BF00-0DA0	C			
Digital output modules DQ 16X24VDC 6ES7132-6BH01-0BA0 6ES7132-6BH01-2BA0	A B	**B**	**Connection of I/O modules in row B: 1 x front adapter, 1 x system cable, 2 x termination board**	
				
			FLKM 20-PA-ET200SP 1099751	FLK 20/2FLK14/EZ-DR/…/KONFEK 0.5 m 2305059 1.0 m 2298470 2.0 m 2298438 3.0 m 2300818 4.0 m 2305237 5.0 m 2902707 10.0 m 2902708 Variable lengths 2304487/…
Digital output modules DQ 8X24VDC 6ES7132-6BF01-0BA0 6ES7132-6BF01-2BA0 6ES7132-6BF01-0AA0 6ES7132-6BF01-2AA0 6ES7132-6BF61-0AA0 6ES7132-6BF01-0CA0	C			
Analog input modules 6ES7134-6GD01-0BA1 6ES7134-6GD01-2BA1 6ES7134-6HD01-0BA1 6ES7134-6HD01-2BA1 6ES7134-6TD00-0CA1 6ES7134-6JD00-0CA1 6ES7134-6JD00-2CA1 6ES7134-6FF00-0AA1 6ES7134-6GF00-0AA1 6ES7134-6JF00-0CA1 6ES7134-6JF00-2CA1 6ES7134-6FB00-0BA1 6ES7134-6GB00-0BA1 6ES7134-6HB00-0CA1 6ES7134-6HB00-0DA1	A	**C**	**Connection of I/O modules in row C: 1 x front adapter, 1 x system cable, 1 x termination board**	
				
			FLKM 14-PA-ET200SP 1166173	FLK 14/EZ-DR/…KONFEK 0.5 m 2288901 1.0 m 2288914 1.5 m 2288927 2.0 m 2288930 3.0 m 2288956 4.0 m 2288972 6.0 m 2290863 8.0 m 2299563 10.0 m 2299576 Variable lengths 2295059/14U/C23/…
Analog input modules 6ES7135-6FB00-0BA1 6ES7135-6GB00-0BA1 6ES7135-6HB00-0CA1 6ES7135-6HB00-0DA1 6ES7135-6HD00-0BA1	A			

Termination boards with screw (SC) or Push-in (PT) connections		V8 adapters for relays
		
Termination board with 20 connection terminal blocks (1 - 20): VIP-2/PT/FLK20 2903790 (PT) VIP-2/SC/FLK20 2315049 (SC)	**Termination board with 20 connection terminal blocks (1 - 20):** VFC-PT/FLK20 1278794 (PT) **Termination board with Siemens SIMATIC ET 200SP-specific marking** VFC-PT/FLK20/ET200SP 1278788 (PT)	
or 2 x PLC-V8 adapter		
		
Termination boards for 8 DI or 8 DO: VIP-2/PT/FLK14/PLC 2903801 (PT) VIP-2/SC/FLK14/PLC 2315214 (SC) **2-conductor connection for 8 DI:** VIP-2/PT/FLK14/8P/PLC 2904284 (PT) VIP-2/SC/FLK14/8P/PLC 2322294 (SC) **2-conductor connection for 8 DO:** VIP-2/PT/FLK14/8M/PLC 2904283 (PT) VIP-2/SC/FLK14/8M/PLC 2322281 (SC) **3-conductor connection for 8 DI or 8 DO:** VIP-3/PT/FLK14/8IM/PLC 2904282 (PT) VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)	**Termination boards with 3-conductor connection technology for 8 DI or 8 DO** VFC-PT/FLK14/PLC 1278798 (PT)	**V8 adapters for PLC-INTERFACE** **V8 adapter for 8 DO, 6.2 mm relay** PLC-V8/FLK14/OUT 2295554 **V8 adapter for 8 DO, 14 mm relay** PLC-V8L/FLK14/OUT 2299660 **V8 adapter for 8 DI, 6.2 mm relay** PLC-V8/FLK14/IN 2296553 For selection of relays, see page 20/21
or 1 x V8 adapter		
		
Termination boards for 8 DI or 8 DO: VIP-2/PT/FLK14/PLC 2903801 (PT) VIP-2/SC/FLK14/PLC 2315214 (SC) **2-conductor connection for 8 DI:** VIP-2/PT/FLK14/8P/PLC 2904284 (PT) VIP-2/SC/FLK14/8P/PLC 2322294 (SC) **2-conductor connection for 8 DO:** VIP-2/PT/FLK14/8M/PLC 2904283 (PT) VIP-2/SC/FLK14/8M/PLC 2322281 (SC) **3-conductor connection for 8 DI or 8 DO:** VIP-3/PT/FLK14/8IM/PLC 2904282 (PT) VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)	**Termination boards with 3-conductor connection technology for 8 DI or 8 DO** VFC-PT/FLK14/PLC 1278798 (PT)	**V8 adapters for PLC-INTERFACE** **V8 adapter for 8 DO, 6.2 mm relay** PLC-V8/FLK14/OUT 2295554 **V8 adapter for 8 DO, 14 mm relay** PLC-V8L/FLK14/OUT 2299660 **V8 adapter for 8 DI, 6.2 mm relay** PLC-V8/FLK14/IN 2296553 For selection of relays, see page 20/21

VARIOFACE system cabling for Siemens SIMATIC ET 200SP HA

Siemens I/O modules	
Web code: #0007	
Digital input modules DI 16X24VDC 6DL1131-6BH00-0PH1 DI 16X24VDC HA	A B
Digital input modules DI 16XNAMUR HA 6DL1131-6TH00-0PH1	A
Digital input modules DI 32X24VDC HA 6DL1131-6BL00-0PH1	A B C
Digital output modules DQ 16X24VDC/0,5A HA 6DL1132-6BH00-0PH1	A B
Digital output modules DQ 32X24VDC/0,5A HA 6DL1132-6BL00-0PH1	A B C
Analog HART input modules AI 16XI 2-Wire HART HA 6DL1134-6TH00-0PH1	A
Analog input modules AI 16XTC/8XRTD 2-/3-/4-Wire HA 6DL1134-6JH00-0PH1	A
Analog output modules AQ 8XI HART HA 6DL1135-6TF00-0PH1	A
Input/output modules AI-DI16/DQ16X24VDC HART 6DL1133-6EW00-0PH1	A

	Front adapters	System cables	
A	**Connection of I/O modules in row A: 1 x front adapter, 1 x system cable, 1 x termination board**		
			
	FLKM-PA-D37/ETHA 1076338 Note: The front adapter is plugged into the M1/H1 terminal blocks. A front adapter is not required for the H0 terminal block with D-SUB connector (6DL1193-6TC00-0DH0).	**PVC** CABLE-D37SUB/B/B/… 1.0 m 2305509 2.0 m 2305512 3.0 m 2305525 4.0 m 2900759 6.0 m 2900760 8.0 m 2900761 10.0 m 2900762 Variable lengths 2302421/37S/C44/…	**Halogen-free** CABLE-D37SUB/B/B/HF/S/…M 1.0 m 2908516 2.0 m 2908517 3.0 m 2908518 4.0 m 2908519 6.0 m 2908520 8.0 m 2908521 10.0 m 2908522 Variable lengths 1075563/…
B	**Connection of I/O modules in row B: 1 x front adapter, 1 x system cable, 2 (4) x termination board**		
			
	FLKM-PA-D37/ETHA 1076338 Note: The front adapter is plugged into the M1/H1 terminal blocks. A front adapter is not required for the H0 terminal block with D-SUB connector (6DL1193-6TC00-0DH0).	**32-channel, PVC** CABLE-D37F/4XD15F/…M/ETHA 1.0 m 1119198 2.0 m 1119200 4.0 m 1119202 6.0 m 1119204 **32-channel, halogen-free** CABLE-D37F/4XD15F/HF/…M/ETHA 1.0 m 1331995 2.0 m 1331992 4.0 m 1331987 6.0 m 1331982	**16-channel, PVC** CABLE-D37F/2XD15F/…M/ETHA 1.0 m 1258787 2.0 m 1258793 4.0 m 1258819 6.0 m 1258820 **16-channel, halogen-free** CABLE-D37F/2XD15F/HF/…M/ETHA 1.0 m 1276251 2.0 m 1276385 4.0 m 1276387 6.0 m 1276388
C	**Connection of I/O modules in row C: 1 x front adapter, 1 x system cable, 1 x termination board**		
			
	FLKM-PA-D37/ETHA 1076338 Note: The front adapter is plugged into the M1/H1 terminal blocks. A front adapter is not required for the H0 terminal block with D-SUB connector (6DL1193-6TC00-0DH0).	CABLE-D37F/FLK50/…M/ETHA 1.0 m 1210707 2.0 m 1210706 3.0 m 1210708 4.0 m 1222442 6.0 m 1222438 8.0 m 1222447 10.0 m 1222255	

Termination boards with screw (SC) or Push-in (PT) connections and PLC-V8 adapters for relays



1:1 termination board with screw connections
VIP-2/SC/D37SUB/M/ET200SP-HA 1100967 (SC)



1:1 termination board with Push-in connections
VIP-2/PT/D37SUB/M/ET200SP-HA 1100964 (PT)



Termination board for 16 channels with knife-disconnect terminal blocks
FLKM-D37SUB/M/MT/16M/ETHA 1274077 (SC)
Termination board for 16 channels, separate negative terminals for each channel, with knife-disconnect terminal blocks
FLKM-D37SUB/M/MT/16IM/ETHA 1274083 (SC)
Termination board for 8 AO with knife-disconnect terminal blocks
FLKM-D37SUB/M/MT/8AO/ETHA 1274065 (SC)

or 2 (4) x PLC-V8 adapter



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/D15S/OUT 2296058
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/D15S/IN 2296074

For selection of relays, see page 20/21



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/D15S/OUT 1104789

For selection of relays, see page 20/21



Termination boards for 32 DI or 32 DO:
VIP-2/PT/FLK50/PLC 2903803 (PT)
VIP-2/SC/FLK50/PLC 2315227 (SC)



Termination board for 32 DO, separate negative terminals for each channel
FLKM 50/32M/PLC 2289719 (SC)
Termination board for 32 DI, separate positive terminals for each channel
FLKM 50/32P/PLC 2291121 (SC)
Termination board for 32 DO or 32 DI, separate positive and negative terminals for each channel
FLKM 50/32IM/PLC 2284523 (SC)
Termination board for 32 DO or 32 DI with knife-disconnect terminal blocks
FLKM 50/KDS3-MT/PPA/PLC 2290614 (SC)



Relay module for 32 DO, 1 N/O contact
UMK-32 RM/MR-G24/1/PLC 2979472 (SC)

VARIOFACE system cabling for Siemens S7-1500 IO (25 mm)

Siemens I/O modules			Front adapters	System cables
Web code: #0007				
Digital input modules DI 16X24VDC 6ES7521-1BH10-0AA0	C	A	**Connection of I/O modules in row A: 1 x front adapter, 1 x system cable, 1 x termination board**	
				
			FLKM 50-PA/25/S7-1500 1089346	FLK 50/EZ-DR/…KONFEK 0.5 m 2289065 1.0 m 2289078 1.5 m 2289081 2.0 m 2289094 3.0 m 2289117 4.0 m 2289133 6.0 m 2289609 8.0 m 2289641 10.0 m 2289683 Variable lengths 2295059/50U/C38/…
Digital input modules DI 32X24VDC 6ES7521-1BL10-0AA0	A B	B	**Connection of I/O modules in row B: 1 x front adapter, 1 x system cable, 4 x termination board**	
				
			FLKM 50-PA/25/S7-1500 1089346	FLK 50/4X14/EZ-DR/ …/KONFEK 0.5 m 2296689 1.0 m 2296692 1.5 m 2296702 2.0 m 2296715 3.0 m 2296728 4.0 m 2296731 6.0 m 2296744 8.0 m 2296757 10.0 m 2296773 Variable lengths 2302405/…
Digital output modules DQ 16X24VDC 6ES7522-1BH10-0AA0	C			
Digital output modules DQ 32X24VDC 6ES7522-1BL10-0AA0	A B	C	**Connection of I/O modules in row C: 1 x front adapter, 2 x system cable, 2 x termination board**	
				
			FLKM 2X14-PA/25/S7-1500 1089345	FLK 14/EZ-DR/…KONFEK 0.5 m 2288901 1.0 m 2288914 1.5 m 2288927 2.0 m 2288930 3.0 m 2288956 4.0 m 2288972 6.0 m 2290863 8.0 m 2299563 10.0 m 2299576 Variable lengths 2295059/14U/C23/…
Digital input and output modules DI 16X24VDC/ DQ 16X24VDC 6ES7523-1BL00-0AA0	A B			

Termination boards with screw (SC) or Push-in (PT) connections and PLC-V8 adapters for relays



Termination boards for 32 DI or 32 DO:
VIP-2/PT/FLK50/PLC 2903803 (PT)
VIP-2/SC/FLK50/PLC 2315227 (SC)



Termination board for 32 DO, separate negative terminals for each channel
FLKM 50/32M/PLC 2289719 (SC)
Termination board for 32 DI, separate positive terminals for each channel
FLKM 50/32P/PLC 2291121 (SC)
Termination board for 32 DO or 32 DI, separate positive and negative terminals for each channel
FLKM 50/32IM/PLC 2284523 (SC)
Termination board for 32 DO or 32 DI with knife-disconnect terminal blocks
FLKM 50/KDS3-MT/PPA/PLC 2290614 (SC)



Relay module for 32 DO, 1 N/O contact
UMK-32 RM/MR-G24/1/PLC 2979472 (SC)

or 4 x PLC-V8 adapter



Termination boards for 8 DI or 8 DO:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection for 8 DI:
VIP-2/PT/FLK14/8P/PLC 2904284 (PT)
VIP-2/SC/FLK14/8P/PLC 2322294 (SC)
2-conductor connection for 8 DO:
VIP-2/PT/FLK14/8M/PLC 2904283 (PT)
VIP-2/SC/FLK14/8M/PLC 2322281 (SC)
3-conductor connection for 8 DI or 8 DO:
VIP-3/PT/FLK14/8IM/PLC 2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)



Termination boards with 3-conductor connection technology for 8 DI or 8 DO
VFC-PT/FLK14/PLC 1278798 (PT)



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

For selection of relays, see page 20/21

or 2 x PLC-V8 adapter



Termination boards for 8 DI or 8 DO:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection for 8 DI:
VIP-2/PT/FLK14/8P/PLC 2904284 (PT)
VIP-2/SC/FLK14/8P/PLC 2322294 (SC)
2-conductor connection for 8 DO:
VIP-2/PT/FLK14/8M/PLC 2904283 (PT)
VIP-2/SC/FLK14/8M/PLC 2322281 (SC)
3-conductor connection for 8 DI or 8 DO:
VIP-3/PT/FLK14/8IM/PLC 2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)



Termination boards with 3-conductor connection technology for 8 DI or 8 DO
VFC-PT/FLK14/PLC 1278798 (PT)



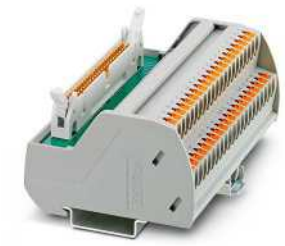
V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

For selection of relays, see page 20/21

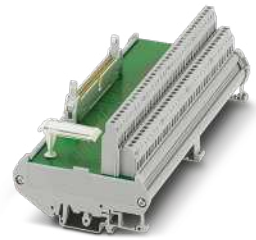
VARIOFACE system cabling for Siemens SIMATIC S7-1500 IO (35 mm), digital

Siemens I/O modules			Front adapters	System cables
Web code: #0007				
Digital input modules DI 16X24VDC 6ES7521-1BH00-0AB0 6ES7521-1BH50-0AA0	B	**A**	**Connection of I/O modules in row A: 1 x front adapter, 1 x system cable, 1 x termination board**	
				
			FLKM 50-PA/PT/DIO/S7-150 2907384 (PT) FLKM 50-PA/SC/DIO/S7-150 2907383 (SC)	FLK 50/EZ-DR/…KONFEK 0.5 m 2289065 1.0 m 2289078 1.5 m 2289081 2.0 m 2289094 3.0 m 2289117 4.0 m 2289133 6.0 m 2289609 8.0 m 2289641 10.0 m 2289683 Variable lengths 2295059/50U/C38/…
Digital input modules DI 32X24VDC 6ES7521-1BL00-0AB0	A B			
Digital output modules DQ 16X24VDC 6ES7522-1BH00-0AB0 6ES7522-1BH01-0AB0	B	**B**	**Connection of I/O modules in row B: 1 x front adapter, 2 (4) x system cable, 2 (4) x termination board**	
				
			FLKM 4X14-PA/PT/DIO/S7-1500 2907382 (PT) FLKM 4X14-PA/SC/DIO/S7-1500 2907381 (SC)	FLK 14/EZ-DR/…KONFEK 0.5 m 2288901 1.0 m 2288914 1.5 m 2288927 2.0 m 2288930 3.0 m 2288956 4.0 m 2288972 6.0 m 2290863 8.0 m 2299563 10.0 m 2299576 Variable lengths 2295059/14U/C23/…
Digital output modules DQ 32X24VDC 6ES7522-1BL00-0AB0 6ES7522-1BL01-0AB0	A B			

Termination boards with screw (SC) or Push-in (PT) connections and PLC-V8 adapters for relays



Termination boards for 32 DI or 32 DO:
VIP-2/PT/FLK50/PLC 2903803 (PT)
VIP-2/SC/FLK50/PLC 2315227 (SC)



Termination board for 32 DO, separate negative terminals for each channel
FLKM 50/32M/PLC 2289719 (SC)
Termination board for 32 DI, separate positive terminals for each channel
FLKM 50/32P/PLC 2291121 (SC)
Termination board for 32 DO or 32 DI, separate positive and negative terminals for each channel
FLKM 50/32IM/PLC 2284523 (SC)
Termination board for 32 DO or 32 DI with knife-disconnect terminal blocks
FLKM 50/KDS3-MT/PPA/PLC 2290614 (SC)



Relay module for 32 DO, 1 N/O contact
UMK-32 RM/MR-G24/1/PLC 2979472 (SC)

or 2 (4) x PLC-V8 adapter



Termination boards for 8 DI or 8 DO:
VIP-2/PT/FLK14/PLC 2903801 (PT)
VIP-2/SC/FLK14/PLC 2315214 (SC)
2-conductor connection for 8 DI:
VIP-2/PT/FLK14/8P/PLC 2904284 (PT)
VIP-2/SC/FLK14/8P/PLC 2322294 (SC)
2-conductor connection for 8 DO:
VIP-2/PT/FLK14/8M/PLC 2904283 (PT)
VIP-2/SC/FLK14/8M/PLC 2322281 (SC)
3-conductor connection for 8 DI or 8 DO:
VIP-3/PT/FLK14/8IM/PLC 2904282 (PT)
VIP-3/SC/FLK14/8IM/PLC 2322278 (SC)



Termination boards with 3-conductor connection technology for 8 DI or 8 DO

VFC-PT/FLK14/PLC 1278798 (PT)



V8 adapters for PLC-INTERFACE
V8 adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT 2295554
V8 adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT 2299660
V8 adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

For selection of relays, see page 20/21

VARIOFACE system cabling for Siemens SIMATIC S7-1500 IO (35 mm), analog

Siemens I/O modules			Front adapters	System cables
Web code: #0007				
Analog input modules 6ES7531-7KF00-0AB0 6ES7531-7MH00-0AB0 6ES7531-7NF00-0AB0 6ES7531-7NF10-0AB0 6ES7531-7PF00-0AB0 6ES7531-7QF00-0AB0	A B	**A**	**Connection of I/O modules in row A: 1 x front adapter, 1 x system cable, 1 x termination board**	
				
			FLKM 50-PA/AN/S7-1500 2907386	FLK 50/EZ-DR/…KONFEK 0.5 m 2289065 1.0 m 2289078 1.5 m 2289081 2.0 m 2289094 3.0 m 2289117 4.0 m 2289133 6.0 m 2289609 8.0 m 2289641 10.0 m 2289683 Variable lengths 2295059/50U/C38/…
Analog output modules 6ES7532-5ND00-0AB0 6ES7532-5HF00-0AB0 6ES7532-5HD00-0AB0	A B	**B**	**Connection of I/O modules in row B: 1 x front adapter, 2 (4) x system cable, 1 (2) x termination board**	
				
			FLKM 4X14-PA/AN/S7-1500 2907385	FLK 14/EZ-DR/…KONFEK 0.5 m 2288901 1.0 m 2288914 1.5 m 2288927 2.0 m 2288930 3.0 m 2288956 4.0 m 2288972 6.0 m 2290863 8.0 m 2299563 10.0 m 2299576 Variable lengths 2295059/14U/C23/…

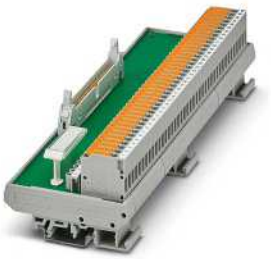
Termination boards with screw (SC) or Push-in (PT) connections



Termination board with S7-1500-specific marking
VIP-3/PT/FLK50/AN/S7-1500 2908496 (PT)
VIP-3/SC/FLK50/AN/S7-1500 2908495 (SC)



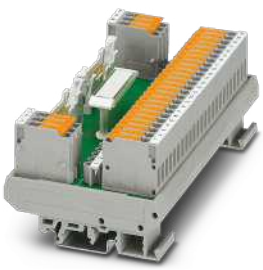
Termination board with S7-1500-specific marking and connections for external power distribution
VIP-3/PT/FLK50/AN/2P/S7-1500 2908499 (PT)
VIP-3/SC/FLK50/AN/2P/S7-1500 2908497 (SC)



Termination boards with S7-1500-specific marking and knife-disconnect terminal blocks
FLKM 50/KDS3-MT/PPA/S7-1500 2909893 (SC)



Termination board with S7-1500-specific marking for signal connections 1 - 16
VIP-3/PT/2FLK14/AN/2P/S7-1500A 2908465 (PT)
VIP-3/SC/2FLK14/AN/2P/S7-1500A 2908464 (SC)
Termination board with S7-1500-specific marking for signal connections 21 - 36
VIP-3/PT/2FLK14/AN/2P/S7-1500B 2908846 (PT)
VIP-3/SC/2FLK14/AN/2P/S7-1500B 2908845 (SC)



Termination boards with S7-1500-specific marking and knife-disconnect terminal blocks
FLKM-2FLK14/KDS3-MT/AN/S7-1500
2909894 (SC)

VARIOFACE system cabling for Yokogawa CS3000 R3

CS3000 I/O modules	
Web code: #0007	
Digital input modules DI32 ADV151	A C
Digital input modules DI 64 ADV161	A C
Digital output modules DO 32 ADV551	A C
Digital output modules DO 64 ADV561	A C
Analog input modules AAI 135 AAI 141 AAI 143 AAR 181 AAT 141 AAV 141 AAV 142 AAI 135	B
Analog output modules AAB 841 AAI 543 AAI 835 AAV 542	B

System cables

A – Connection of I/O modules in row B: 1 (2) x system cable, 1 (2) x termination board





PVC for ADV151, ADV551 FLK 50-PA/EZ-DR/KS/…/YUC		Halogen-free for ADV151, ADV551 FLK 50-PA/EZ-DR/HF/KS/…/YUC		PVC for ADV161, ADV561 FLK-MIL-50/EZ-DR/KS/…/YCS	
2.0 m	2314299	2.0 m	2904740	2.0 m	2314590
3.0 m	2314309	3.0 m	2904741	3.0 m	2314781
4.0 m	2314312	4.0 m	2904742	4.0 m	2314794
6.0 m	2314927	6.0 m	2904743	10.0 m	2314804
8.0 m	2314930	8.0 m	2904745	15.0 m	2314817
10.0 m	2314325	10.0 m	2904637	20.0 m	2314820
15.0 m	2314338	15.0 m	2904638	30.0 m	2901018
20.0 m	2314503	20.0 m	2904487		
25.0 m	2314516	25.0 m	2904639		
30.0 m	2314529	30.0 m	2904640		

B – Connection of I/O modules in row B: 1 x system cable, 1 x termination board



PVC FLK 40-PA/EZ-DR/KS/…/YUC		Halogen-free FLK 40-PA/EZ-DR/HF/KS/…/YUC	
2.0 m	2314341	2.0 m	2904748
3.0 m	2314354	3.0 m	2904749
4.0 m	2314367	4.0 m	2904750
6.0 m	2314943	6.0 m	2904751
8.0 m	2314956	8.0 m	2904753
10.0 m	2314370	10.0 m	2904646
15.0 m	2314383	15.0 m	2904647
20.0 m	2314532	20.0 m	2904488
25.0 m	2314545	25.0 m	2904648
30.0 m	2314558	30.0 m	2904649

C – Connection of I/O modules in row C: 1 (2) x system cable, 4 (8) x PLC-V8 adapter for relay





PVC for ADV151, ADV 551 CABLE-50/4FLK14/…/YUC:		PVC for ADV161, ADV561 FLKMIL-50/4FLK14/EZ-DR/…/CS	
2.0 m	2314655	2.0 m	2306304
3.0 m	2314668	3.0 m	2306964
4.0 m	2314671	5.0 m	2306977
6.0 m	2318978	10.0 m	2306980
10.0 m	2314684	15.0 m	2301503
15.0 m	2322773	20.0 m	2301914
20.0 m	2314778		

Termination boards, relay modules with screw (SC) or spring-cage (SP) connections and V8 adapters for relays



Termination board for 32 DO or 32 DI, separate positive and negative terminals for each channel, non-redundant
FLKMS-KS50/32IM/YCS 2314451 (SC)
Termination board for 32 DO or 32 DI, separate positive and negative terminals for each channel, redundant
FLKMS-2KS50/32IM/YCS 2901896 (SC)
Termination board for 32 DI, separate positive and negative terminals for each channel, LED, redundant
UM-2KS50/DI32/CS/SO180 2901013 (SC)
UM-2KS50/DI32/CS/Z/SO180 2311360 (SP)



Termination board for 32 DO or 32 DI, fuse (5X20) for each channel, redundant
FLKM-KS50/SI/YCS 2314464 (SC)
Termination board for 32 DI, fuse (TR5) and isolating plug for each channel, LED, redundant
FLKM-2KS50/PMT/ADV151/YCS 2321884 (SC)
FLKM-2KS50/PMT/ADV151/Z/YCS 2321923 (SP)



Relay modules for 32 DO, 1 N/O contact:
UMK-32 RM/MR-G24/1/YCS (250 V AC/3 A) 2969055 (SC)
24 V DC/2 A, fuse and jumper:
UM-2KS50/32R/SI/J/DO24V/P/YCS 1089344 (SC)
230 V AC/2 A, fuse and jumper:
UM-KS50/32-MR/21/ADV551/SO207 2311108 (SP)
UM-KS50/32MR/1/ADV551/SC/SO207 2900899 (SC)
Relay modules for 32 DI, 24 V DC, fuse, jumper:
UM-KS50/32-MR/21/ADV151/SO207 2311111 (SP)
UM-KS50/32MR/1/ADV151/SC/SO207 2900898 (SC)
UM-2KS50/32-MR/21/ADV151/SO179 2310222 (SC)



Termination boards for AI or AO, 1:1 connection, non-redundant
FLKM-KS40/YCS 2314642 (SC)
FLKM-KS40/YCS/ZFKDS 2314723 (SP)
Termination boards for AI or AO, 1:1 connection, redundant system connector
FLKM-2KS40/YCS 2901056 (SC)
FLKM-2KS40/YCS/ZFKDS 2314752 (SP)



Termination board for AAI141 AAI143, redundant, HART
FLKMS-KS40/AI/YCS 2314286 (SC)
Termination board for AAI141 AAI143, fuse (5X20) and LED for each channel, redundant, HART
FLKMS-KS40/SI/AI16/YCS 2314273 (SC)



V8 adapters for PLC-INTERFACE Adapter for 8 DO, 6.2 mm relay
PLC-V8/FLK14/OUT/M 2304102
Adapter for 8 DI, 6.2 mm relay
PLC-V8/FLK14/IN 2296553

For selection of relays, see page 20/21



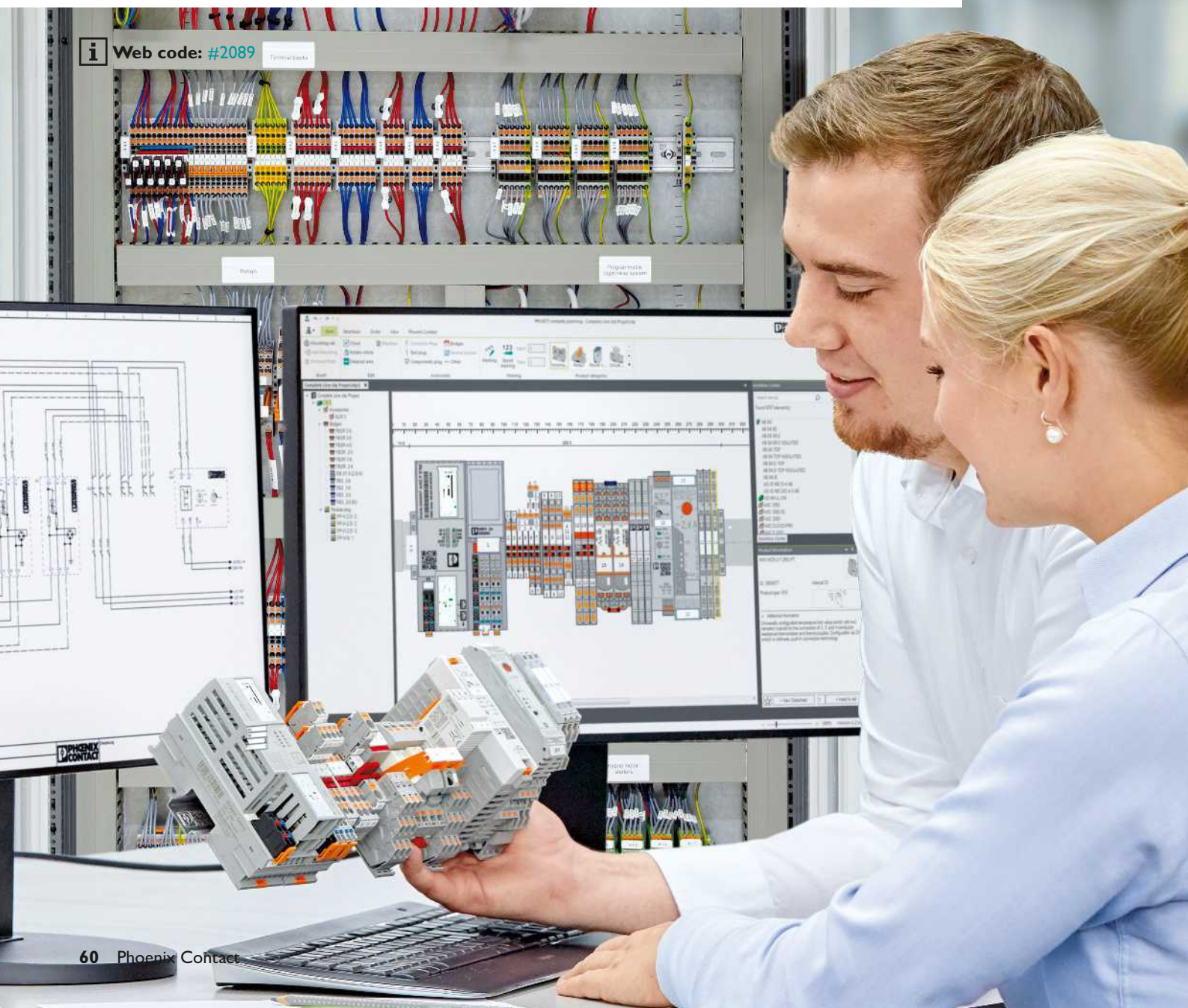
V8 adapters for PLC-INTERFACE Adapter for 8 DO, 14 mm relay
PLC-V8L/FLK14/OUT/M 2304306

For selection of relays, see page 20/21

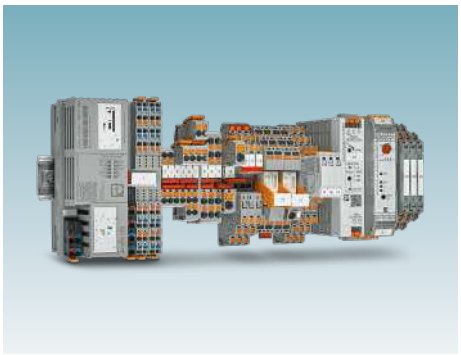
COMPLETE line – the comprehensive solution for the control cabinet

The COMPLETE line system encompasses technologically leading and coordinated hardware and software products, consulting services, and system solutions that help you optimize your processes in control cabinet building. Engineering, purchasing, installation, and operation become significantly easier for you.

Web code: #2089



Your advantages in detail:



Comprehensive product portfolio

With COMPLETE line, we offer a complete product portfolio of technologically leading products. This includes:

- Controllers and I/O modules
- Power supplies and device circuit breakers
- Terminal blocks and distribution blocks
- Relay modules and motor starters
- Signal conditioners
- Safety technology
- Surge protection
- Heavy-duty connectors



Intuitive handling

With the simple, intuitive handling of the coordinated hardware components, you will save time during installation, startup, and maintenance. With Push-in connection technology, you can wire applications quickly and without using tools. The broad, technologically leading product portfolio will always provide you with the right product for standard or special applications.



Save time throughout the entire engineering process

The clipx ENGINEER planning and marking software supports the entire process of control cabinet building. The program features an intuitive user interface that enables the individual planning, automatic checking, and direct ordering of terminal strips.



Reduced logistics costs

Reduced variety of parts with standardized marking, bridging, and testing accessories. The COMPLETE line system coordinates products, design, and accessories so that you benefit from maximum reusability and thus reduce your logistics costs.



Optimized processes in control cabinet building

COMPLETE line supports you, from engineering through to manufacturing, in designing your control cabinet production as efficient as possible. This is how your customized concept for optimizing your processes in control cabinet building is created. Our terminal strip production helps you to flexibly manage order peaks or to supply your control cabinet production with fully assembled DIN rails just in time.

COMPLETE **line**

The new standard for the control cabinet

Discover the extensive COMPLETE line product portfolio and find out more about COMPLETE line and the comprehensive solutions for your control cabinet.

Visit our website:
phoenixcontact.com/completeline

Worldwide service and support: We are there for you

At Phoenix Contact, the focus is always on you, the customer. With over 50 subsidiaries and more than 30 agencies around the world, we are always close by.

As a result, you will receive expert, first-hand advice and benefit from fast and timely delivery of a complete package consisting of high-quality, optimally coordinated components. Our expertise and high level of vertical integration also allow customized solutions tailored to your needs. We also support you after your purchase with our comprehensive after-sales services.

Web code: #2247



Your advantages in detail:



Fast terminal strip production

Our terminal strip production service provides help in managing order peaks flexibly and allows terminal strips to be delivered just in time for series production. The fully assembled and marked terminal strips, already equipped with accessories, just need to be installed and connected.



Individual set solutions

To reduce the effort of materials and stock management, you can order prepicked material sets under a single item number.



Customer-specific solutions

Can't find what you're looking for in our range? No problem: From minor adaptations to completely new product developments, we focus on your specific requirements.



Global approvals and certificates

Our numerous certificates are proof that you can put your full trust in our products, because quality is essential. We strive to satisfy this requirement in every respect. For this reason, our systems, processes, and products are tested and certified several times over.



Comprehensive after-sales services

We are there for you – not just before your purchase, but also after with our comprehensive after-sales services. This includes our repair service, exchange service, and replacement parts service.



Comprehensive training program

From the basics to specialist expertise: we provide you with the skills you need in line with your specific requirements.



Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented products and solutions for the electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network reaching across more than 100 countries with over 22,000 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide range of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. This especially applies to the target markets of energy, infrastructure, industry, and mobility.

You can find your local partner at

phoenixcontact.com

MNR 1443525/2023-07-15/01

3011378978