



Connectors for industrial applications

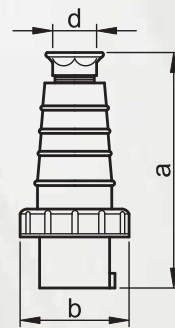
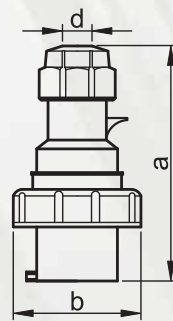
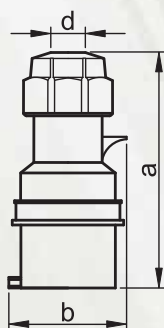
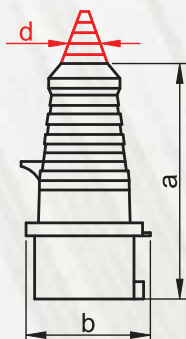


Connectors for industrial applications

The industrial connectors are designed to connect electrical equipments to the low-voltage network. They are used mainly in industrial environment, such as workshops, agriculture, commerce, construction sites etc., but sometimes also in households.

Type	Rated current	Type of connection
- Plugs - Portable socket outlets - Surface type plugs - Surface type socket outlet - Installable socket outlet - Installable socket outlet with side protective contact - Socket outlet and plug with side protective contact - Portable connection box	16 A 32 A 63 A 125 A	- Normal - With cable-break protector - With outer cable gland - With increased protection degree
	Protection degree	Number of poles
	- IP44 - IP67	- L1+N+$\perp$; - L1+ L2+ L3+$\perp$ - L1+ L2+ L3+N+$\perp$

Industrial Plugs	Tracon code	Rated current	Rated voltage	Number of poles	a (mm)	b (mm)	d (mm)	Protection degree	Type of connection
	TICS-013P	16 A	250 V	2P + 	120	60	7-13	IP44	With outer cable gland
	TICS-014P		400 V	3P + 	120	68	7-13		
	TICS-015P		400 V	3P + N + 	127,5	75	7-17		
	TICS-023P	32 A	250 V	2P + 	143,5	79	7-17	IP44	
	TICS-024P		400 V	3P + 	143,5	79	7-17		
	TICS-025P		400 V	3P + N + 	150	88	7-17		
	TICS-0132	16 A	250 V	2P + 	120	72	7-13	IP67	With increased protection degree
	TICS-0142		400 V	3P + 	125	80	7-13		
	TICS-0152		400 V	3P + N + 	128	88	7-17		
	TICS-0232	32 A	250 V	2P + 	143	93	7-17	IP67	
	TICS-0242		400 V	3P + 	143	93	7-17		
	TICS-0252		400 V	3P + N + 	151	100	7-17		
	TICS-033	63 A	250 V	2P + 	235	105	16-38	IP67	With increased protection degree
	TICS-034		400 V	3P + 	235	105	16-38		
	TICS-035		400 V	3P + N + 	235	105	16-38		
	TICS-043	125 A	250 V	2P + 	290	123	24-48	IP67	
	TICS-044		400 V	3P + 	290	123	24-48		
	TICS-045		400 V	3P + N + 	290	123	24-48		
	TICS-013	16 A	250 V	2P + 	113	60	7-13	IP44	Normal
	TICS-014		400 V	3P + 	113	68	7-13		
	TICS-015		400 V	3P + N + 	126	75	7-17		
	TICS-023	32 A	250 V	2P + 	136	79	7-17	IP44	
	TICS-024		400 V	3P + 	136	79	7-17		
	TICS-025		400 V	3P + N + 	138,5	88	7-17		
	TICS-013L	16 A	250 V	2P + 	141,5	60	7-13	IP44	With cable-break protector
	TICS-014L		400 V	3P + 	141,5	68	7-13		
	TICS-015L		400 V	3P + N + 	160	75	7-17		
	TICS-023L	32 A	250 V	2P + 	170	79	7-17	IP44	
	TICS-024L		400 V	3P + 	170	79	7-17		
	TICS-025L		400 V	3P + N + 	175	88	7-17		





Connectors for industrial applications



Structure

The construction of the devices ensure the correct connection and the versions for different voltages can not be mixed up. The protection contacts are placed on normal way (6h). The connector with IP67 protection degree has high resistance against dust and water. After closing the end cap, the cap and its sealing secures the IP 67 protection degree.

Advantages:

- Fast installation
- Safe and quick cable entry

GTIHEA CERTIFICATE NO.

LVD03-199
LVD03-200

GTIHEA CERTIFICATE NO.

LVD03-201
LVD03-202



RELEVANT STANDARD

EN 60309-1

RELEVANT STANDARD

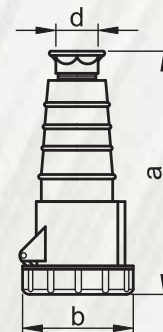
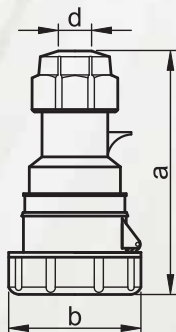
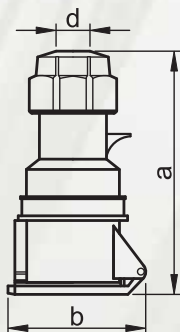
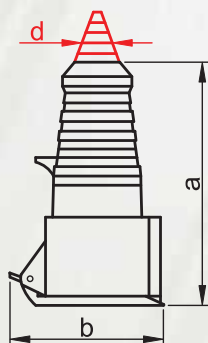
EN 60309-2

RELEVANT STANDARD

EN 60529

Portable socket outlets

Tracon code	Rated current	Rated voltage	Number of poles	a (mm)	b (mm)	d (mm)	Protection degree	Type of connection	
TICS-213P	16 A	250 V	2P + ⏚	127	73	7-13	IP44	With outer cable gland	
TICS-214P		400 V	3P + ⏚	135	79	7-13			
TICS-215P		400 V	3P + N + ⏚	135	85	7-17			
TICS-223P	32 A	250 V	2P + ⏚	154	91	10-21	IP44	With increased protection degree	
TICS-224P		400 V	3P + ⏚	154	91	10-21			
TICS-225P		400 V	3P + N + ⏚	157	98	10-21			
TICS-2132	16 A	250 V	2P + ⏚	131	78	7-13	IP67	With increased protection degree	
TICS-2142		400 V	3P + ⏚	138	86	7-13			
TICS-2152		400 V	3P + N + ⏚	142	92	7-17			
TICS-2232	32 A	250 V	2P + ⏚	154	96	10-21	IP67	With increased protection degree	
TICS-2242		400 V	3P + ⏚	154	97	10-21			
TICS-2252		400 V	3P + N + ⏚	165	102	10-21			
TICS-233	63 A	250 V	2P + ⏚	245	110	16-38	IP67	With increased protection degree	
TICS-234		400 V	3P + ⏚	245	110	16-38			
TICS-235		400 V	3P + N + ⏚	245	110	16-38			
TICS-243	125 A	250 V	2P + ⏚	320	120	24-48	IP67	With increased protection degree	
TICS-244		400 V	3P + ⏚	320	120	24-48			
TICS-245		400 V	3P + N + ⏚	320	120	24-48			
TICS-213	16 A	250 V	2P + ⏚	122	68	7-13	IP44	Normal	
TICS-214		400 V	3P + ⏚	122	79	7-13			
TICS-215		400 V	3P + N + ⏚	136	92	7-17			
TICS-223	32 A	250 V	2P + ⏚	146	93	7-17	IP44	Normal	
TICS-224		400 V	3P + ⏚	146	93	7-17			
TICS-225		400 V	3P + N + ⏚	150	100	7-17			
TICS-213L	16 A	250 V	2P + ⏚	150	68	7-13	IP44	With cable-break protector	
TICS-214L		400 V	3P + ⏚	150	79	7-13			
TICS-215L		400 V	3P + N + ⏚	172	92	7-17			
TICS-223L	32 A	250 V	2P + ⏚	180	93	7-17	IP44	With cable-break protector	
TICS-224L		400 V	3P + ⏚	180	93	7-17			
TICS-225L		400 V	3P + N + ⏚	150	100	7-17			



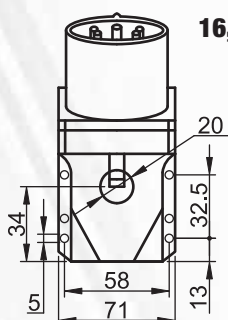


Connectors for industrial applications

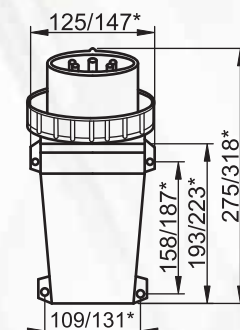
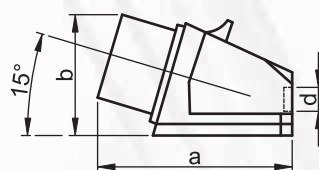


Surface type plugs

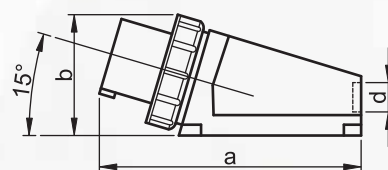
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	TICS-513	16 A	250 V	2P + 	100	85	28	IP44	Normal
	TICS-514		400 V	3P + 	110	105	28		
	TICS-515		400 V	3P + N + 	110	108	28		
	TICS-523	32 A	250 V	2P + 	130	118	28	IP44	
	TICS-524		400 V	3P + 	130	118	28		
	TICS-525		400 V	3P + N + 	130	120	28		
	TICS-533	63 A	250 V	2P + 	200	130	PG-29	IP67	With increased protection degree
	TICS-534		400 V	3P + 	200	130	PG-29		
	TICS-535		400 V	3P + N + 	200	130	PG-29		
	TICS-543	125 A	250 V	2P + 	300	150	PG-29	IP67	
	TICS-544		400 V	3P + 	300	150	PG-29		
	TICS-545		400 V	3P + N + 	300	150	PG-29		



16, 32 A

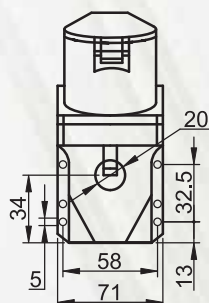


63, 125* A

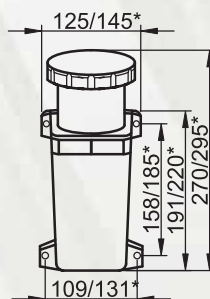
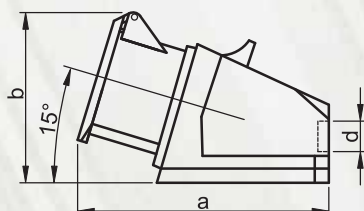


Surface type socket outlets

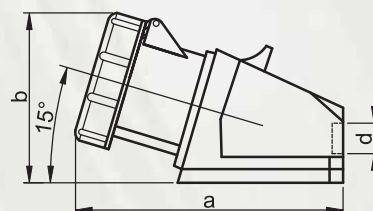
	Tracon code	Rated current	Rated voltage	Number of poles	a (mm)	b (mm)	d (mm)	Protection degree	Type of connection
	TICS-113	16 A	250 V	2P + 	130	85	28	IP44	Normal
	TICS-114		400 V	3P + 	130	90	28		
	TICS-115		400 V	3P + N + 	150	100	28		
	TICS-123	32 A	250 V	2P + 	155	100	28	IP44	
	TICS-124		400 V	3P + 	170	105	28		
	TICS-125		400 V	3P + N + 	175	110	28		
	TICS-1132	16 A	250 V	2P + 	135	90	PG-21	IP67	With increased protection degree
	TICS-1142		400 V	3P + 	135	95	PG-21		
	TICS-1152		400 V	3P + N + 	157	105	PG-21		
	TICS-1232	32 A	250 V	2P + 	170	105	PG-21	IP67	
	TICS-1242		400 V	3P + 	170	105	PG-21		
	TICS-1252		400 V	3P + N + 	175	110	PG-21		
	TICS-133	63 A	250 V	2P + 	200	130	PG-29	IP67	
	TICS-134		400 V	3P + 	200	130	PG-29		
	TICS-135		400 V	3P + N + 	200	130	PG-29		
	TICS-143	125 A	250 V	2P + 	300	150	PG-36	IP67	
	TICS-144		400 V	3P + 	300	150	PG-36		
	TICS-145		400 V	3P + N + 	300	150	PG-36		



16, 32 A



63, 125* A

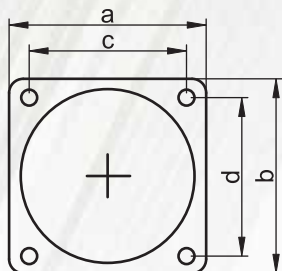
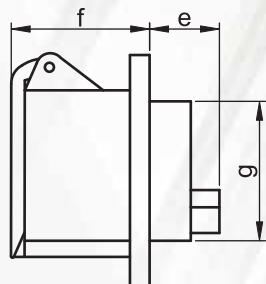




Connectors for industrial applications



Installable straight socket outlet



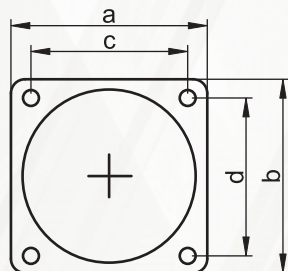
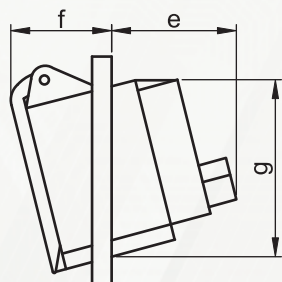
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Tracon code	Rated current (A)	Rated voltage (V)	Number of poles	Dimensions (mm)							Protection degree
				a	b	c	d	e	f	g	
TICS-413	16	250	2P + $\perp$	69	69	56	56	30	47	50	IP44
TICS-414	16	400	3P + $\perp$	69	69	56	56	25	51	43	IP44
TICS-415	16	400	3P + N + $\perp$	69	69	56	56	27	50	55	IP44
TICS-423	32	250	2P + $\perp$	71	71	56	56	29	61	55	IP44
TICS-424	32	400	3P + $\perp$	71	71	56	56	29	61	55	IP44
TICS-425	32	400	3P + N + $\perp$	71	71	56	56	29	61	60	IP44

Installable slanted socket outlet



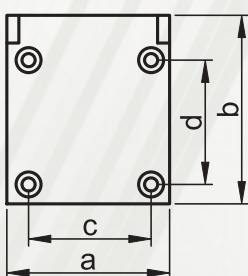
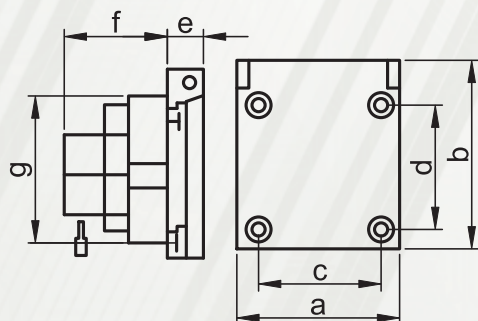
RELEVANT STANDARD

EN 60309-1



Tracon code	Rated current (A)	Rated voltage (V)	Number of poles	Dimensions (mm)							Protection degree
				a	b	c	d	e	f	g	
TICS-313	16	250	2P + $\perp$	62	68	47	48	36	37	55	IP44
TICS-314	16	400	3P + $\perp$	76	86	60	61	47	37	64	IP44
TICS-315	16	400	3P + N + $\perp$	76	86	60	61	47	37	72	IP44
TICS-323	32	250	2P + $\perp$	80	96	60	70	42	43	75	IP44
TICS-324	32	400	3P + $\perp$	80	96	60	70	42	43	75	IP44
TICS-325	32	400	3P + N + $\perp$	80	96	60	70	42	47	81	IP44

Installable socket outlet with side or male protective contact



RELEVANT STANDARD

IEC 60884-1



Tracon code	Rated current (A)	Rated voltage (V)	Number of poles	Protective contact	Dimensions (mm)							Cover
					a	b	c	d	e	f	g	
TICS-105S	16	250	2P + $\perp$	Side	50	58	38	38	11	32	44	Round
TICS-105S2	16	250	2P + $\perp$	Side	50	58	38	38	11	32	44	Rectangular
TICS-105SF	16	250	2P + $\perp$	Male	50	58	38	38	11	32	44	Round



Connectors for industrial applications



Socket outlet and plug with side protective contact

With rubber protection ring and protective cap.
Cable to be used: H07RN-F

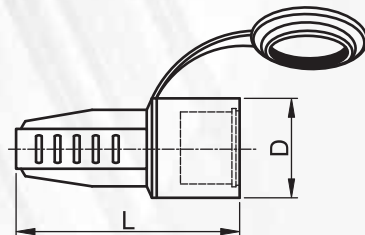
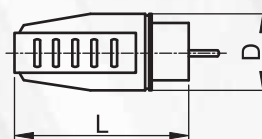
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IEC 60884-1 EN 60529

TICS-012G



TICS-212G



Tracon code	Rated current	Rated voltage	Number of poles	Protection degree	D (mm)	L (mm)	Type of connector
TICS-012G*	16 A	250 V	2P + $\perp$	-	43	87	Socket outlet (rubber)
TICS-212G*	16 A	250 V	2P + $\perp$	IP44	51	110	Plug (rubber)
TICS-212GF	16 A	250 V	2P + $\perp$	IP44	51	110	Pin-type socket (rubber)

*These types meet the requirements of IP 44 protection even on connected state

Rubber hang-on triple socket outlet

Degree of protection: IP 44
With rubber protection ring and protective cap.

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EN 60529

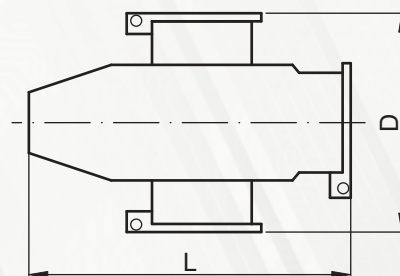
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TICS-A4F

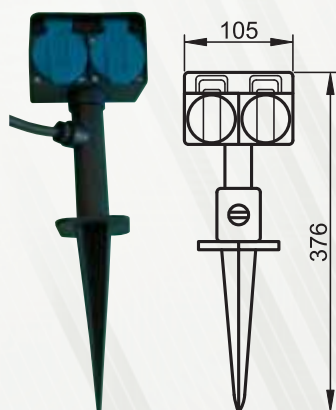


TICS-A4



Tracon code	Rated current	Rated voltage	Inlet	Outlet	D (mm)	L (mm)
TICS-A4	16 A	250 V	3×G2,5 H07RN-F	3 pcs 2P + $\perp$ Schuko socket	115	150
TICS-A4F	16 A	250 V	3×G2,5 H07RN-F	3 pcs 2P + $\perp$ pin socket	95	140

Inserted garden socket outlet



This socket outlet is well applicable in gardens. It can supply up to two devices at the same time.

Cord type: H07RN-F (rubber hose)



RELEVANT STANDARD
IEC 60884-1

Tracon code	Rated voltage	Protection degree	Protective conductor	Wire
TGS	230 V, 50 Hz	IP 44	side	5 m
TGS-F	230 V, 50 Hz	IP 44	male	2.8 m



Connectors for industrial applications



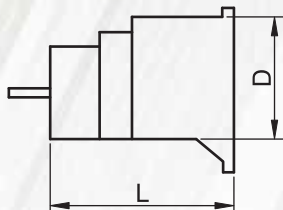
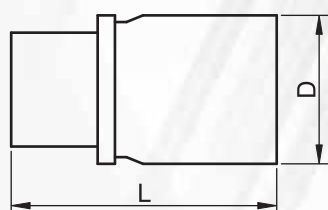
Adaptors with side protective contact

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RELEVANT STANDARD

IEC 60884-1



TICS-A1



TICS-A3

Tracon code	Rated current	Rated voltage	Number of poles	Protection degree	D (mm)	L (mm)	Type of connector
TICS-A1	16 A	250 V	2P + $\perp$	-	50	110	CEE plug / Schuko socket
TICS-A3	16 A	250 V	2P + $\perp$	-	73	84	Socket plug / CEE outlet

Industrial distributor socket outlets

Degree of protection: IP44

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MSZ EN 60309



TICS-1023



TICS-1024



TICS-1605

Tracon code	Rated current	Rated voltage	Inlet	Outlet	Width × Length (mm)
TICS-1023	16 A	250 V	1 pc 2P + $\perp$ CEE socket	3 pcs 2P + $\perp$ CEE socket	220×226
TICS-1024	16 A	400 V	1 pc 3P + $\perp$ CEE socket	3 pcs 3P + $\perp$ socket	220 ×226
TICS-1605	16 A	400 V	1 pc 3P + N + $\perp$ CEE socket	1 pc 3P + N + $\perp$ CEE socket 3 pcs 2P + $\perp$ Schuko socket	110×226

Connecting cables for distribution boxes with 16 A inlet

TDB-CSK1

1 pc 16A/400V, 3P+N+ $\perp$, CEE terminal socket
1 pc 16A/400V, 3P+N+ $\perp$, CEE terminal plug
5 m 5 × G2,5 mm² H07RN-F cable



RELEVANT STANDARD

EN 60309

Connecting cables for distribution boxes with 32 A inlet

TDB-CSK2

1 pc 32A/400V, 3P+N+ $\perp$, CEE terminal socket
1 pc 32A/400V, 3P+N+ $\perp$, CEE terminal plug
5 m 5 × G4 mm² H07RN-F cable



RELEVANT STANDARD

EN 60309





Connectors for industrial applications



Portable connection boxes for industrial applications

Portable industrial socket boxes are suitable in places where several electrical consumers operate under different nominal voltages, i.e. equipped with different plugs shall be powered together. The large selection of available boxes enables for users to choose the appropriated one for their applications.

The versions marked "F" are provided with protective pin (2P + $\perp$). For versions delivered without supply cable the installation of the cable (proper type and cross-section) should be made by a qualified electrician.



TDB06-1 and TDBF06-1

Dimensions	425 × 135 × 95 mm
Supply cable:	1 CEE plug: 16A 2P + $\perp$ 230V~ cable: 3G 2.5 mm ² (length: 2.2 m), stuffing box: PG-21
Built-in sockets	6 sockets 16 A / 230 V, 2P + $\perp$;
Built-in protective devices	1 circuit breaker, 25 A, 2P, 0.03 A, 230V~; 3 on-off switches, 16 A, 1P, 230 V~;
Degree of protection	IP 44



TDB06-2

Dimensions	425 × 135 × 95 mm
Supply cable:	1 CEE plug: 16 A; 2P + $\perp$; 230V~; cable: 3G 2.5 mm ² (length: 2.2 m), stuffing box: PG-21
Built-in sockets	4 sockets, 16 A / 230 V, 2P + $\perp$; 1 CEE socket, 16 A / 230V, 2P + $\perp$
Built-in protective devices	1 circuit breaker, 25 A, 2P, 0.03 A, 230V~ 3 on-off switches, 16 A, 1P, 230 V~;
Degree of protection	IP 44



TDB11-1 and TDBF11-1

Dimensions/Degree of protection	320 × 275 × 100 mm / IP 44
Supply plug:	CEE plug 16 A / 400V, 3P + N + $\perp$, 415 / 240 V~;
Built-in sockets	4 sockets, 16 A / 230 V, 2P + $\perp$; 1 socket CEE, 16A / 400 V, 3P + N + $\perp$; 1 socket CEE, 16 A / 230V, 3P + $\perp$;
Built-in protective devices	1 circuit breaker 40 A, 4P, 0.03 A, 400 V~ ; 1 on-off switch 16 A, 3P, 400 V~ ; 4 on-off switches 32 A, 1P, 230 V~ ;



TDB11-2 and TDBF11-2

Dimensions/Degree of protection	320 × 275 × 100 mm / IP 44
Supply cable:	CEE plug 16 A / 400V, 3P + N + $\perp$, 415 / 240 V~; cable 5G, 2.5 mm ² (length: 2.2 m), stuffing box: PG-21
Built-in sockets	4 sockets, 16 A / 230 V, 2P + $\perp$; 1 socket CEE, 16 A / 400 V, 3P + N + $\perp$; 1 socket CEE, 16 A / 230V, 3P + $\perp$; 1 socket CEE, 16 A / 230V, 2P + $\perp$;
Built-in protective devices	2 on-off switches 16 A, 3P, 400 V~ ; 5 on-off switches 16 A, 1P, 230 V~ ;



Connectors for industrial applications



TDB11-4 and TDBF11-4

Dimensions/Degree of protection	320 × 275 × 100 mm / IP 44
Supply cable and plug:	CEE plug 32 A / 400V, 3P + N + $\perp$, 415 / 240 V~; cable 5G, 4 mm ² (length:2.2m), stuffing box: PG-21
Built-in sockets	4 sockets, 16 A / 230 V, 2P + $\perp$; 1 socket CEE, 32 A / 400 V, 3P + N + $\perp$; 2 sockets CEE, 16 A / 400 V, 3P + N + $\perp$;
Built-in protection devices	1 circuit breaker 40 A, 4P, 0.03 A, 400 V~ ; 1 on-off switch, 32 A, 3P, 400 V~ ; 4 on-off switches 16 A, 1P, 230 V~ ;



TDB14M-01

Dimensions/Degree of protection	410 × 300 × 100 mm / IP 44
Supply plug	CEE plug 32 A / 400V, 3P + N + $\perp$, 415 / 240 V~;
Built-in sockets	4 sockets, 16 A / 230 V, 2P + $\perp$ (protective pin); 1 socket CEE, 32 A / 400 V, 3P + N + $\perp$; 1 sockets CEE, 16 A / 400 V, 3P + N + $\perp$;
Built-in protection devices	1 circuit breaker 40 A, 4P, 0.03 A, 400 V~ ; 1 on-off switch, 32 A, 3P, 400 V~ ; 1 on-off switch, 16 A, 3P, 400 V~ ; 4 on-off switches 16 A, 1P, 230 V~ ;



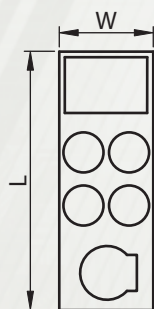
TDB14M-03

Dimensions/Degree of protection	410 × 300 × 100 mm / IP 44
Supply plug	CEE plug 32 A / 400V, 3P + N + $\perp$, 415 / 240 V~; cable 5G, 4 mm ² (length:2.2m), stuffing box: PG-21
Built-in sockets	4 sockets, 16 A / 230 V, 2P + $\perp$ (protective pin); 1 socket CEE, 32 A / 400 V, 3P + N + $\perp$; 1 sockets CEE, 16 A / 400 V, 3P + N + $\perp$; 1 sockets CEE, 16 A / 400 V, 3P + $\perp$;
Built-in protection devices	1 circuit breaker 40 A, 4P, 0.03 A, 400 V~ ; 1 on-off switch, 32 A, 3P, 400 V~ ; 1 on-off switch, 16 A, 3P, 400 V~ ; 4 on-off switches 16 A, 1P, 230 V~ ;

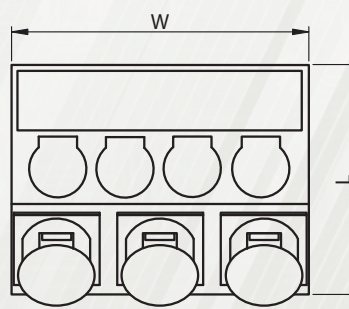
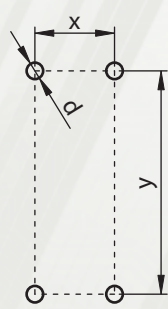


Dimensions

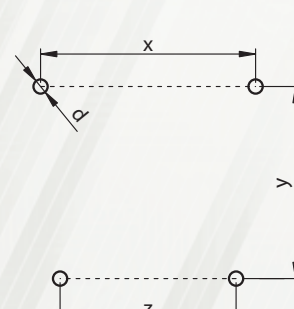
Type	L (mm)	W (mm)	H (mm)	x (mm)	y (mm)	z (mm)	d (mm)
TDB06	425	135	95	75	385	75	6
TDB11	320	275	100	195	275	87	6
TDB14	410	300	100	200	375	130	6



TDB-06



TDB-11, -14





Connectors for industrial applications



Hollow industrial connection boxes

When industrial connection boxes are applied, these often require individual designs, for which factory-made constructions are unsatisfactory. This is why we offer hollow connection boxes, in which custom-made constructions or connection schemes can be placed.

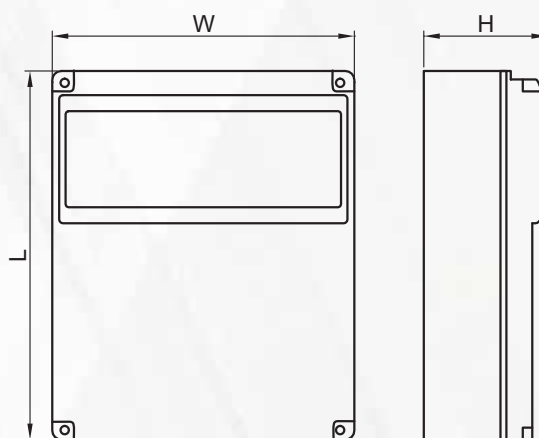
The hollow boxes contain a 35/7.5 mm mounting rail, for fixation of the internal devices.

Material: ABS
Protection level: IP55

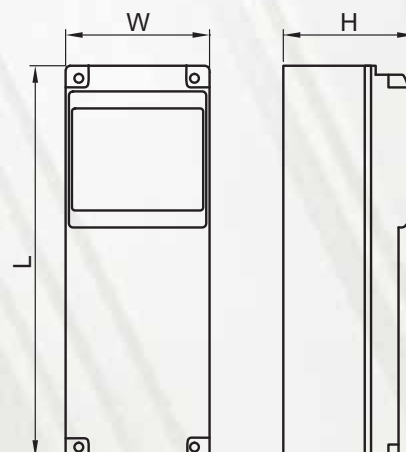
RELEVANT STANDARD

EN 60439-1

Tracon code	Thinned spots in the side walls	number of modules	L (mm)	W (mm)	H (mm)
TDB351710	6 items of $\varnothing$ 22 mm holes for PG-16	6	350	170	100
TDB302210	6 items of $\varnothing$ 29 mm holes for PG-21 + 4 items of $\varnothing$ 42 mm holes for MG-40	11	300	220	100



Tracon code	Thinned spots in the side walls	number of modules	L (mm)	W (mm)	H (mm)
TDB231377	6 items of $\varnothing$ 22 mm holes for PG-16	6	230	125	77
TDB351377	6 items of $\varnothing$ 22 mm holes for PG-16	6	350	125	77
TDB461377	6 items of $\varnothing$ 22 mm holes for PG-16	6	460	125	77



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