A

Impianti elettrici

Progettazione e installazione di impianti elettrici ad uso civile ed industriale



Visita il nostro store

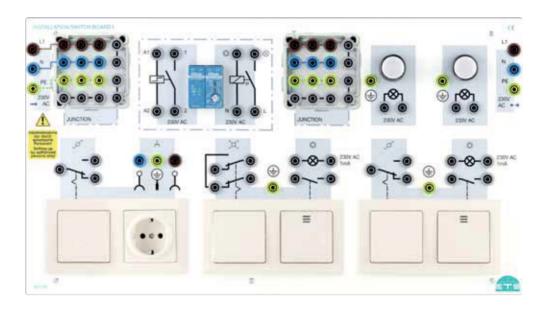


another way to care



Installation tECHnoloGY

Installation switch Board I



1

Learning Objectives

-) Plan and execute electrical installations
-) analyzing circuits: components, function, description, operation principle
-) Commissioning and troubleshooting

Technical data

-) 2 distribution fields
-) 2 two-way switches
-) 2 pushbuttons
-) 2 pilot lamps for pushbuttons
-) 1 intermediate switch
-) 1 schuko socket
-) 1 remote switch
-) 1 universal staircase relay with off-prewarning timer, settable time: 1 ...30 min
-) 2 indicator lamps, for free wiring
-) Connection of all in- and outputs via safety sockets (4 mm)

Design

-) Experimenting Board in a4 format
-) Four-color front panel design
-) a special coating makes the panel surface scratchproof
-) Didactic standard labelling with operating instructions and connection possibilities facilitate commissioning by the user

No.	Designation	Order No.
1	Installation switch Board I	43109
2	set of Ets ring binders	91904
3	Installation t echnology - Instructor's Manual	43135CD-EnG
4	Installation technology - student Manual	43136CD-EnG
5	Installation t echnology - Presentation aids	43137CD-EnG
6	Installation technology - Commissioning and troubleshooting	42202CD-EnG
7	tECHnoCard ® - Installation switch Board	43168-EnG
n.ill.	4 mm safety test lead set, 30 pieces	90009

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Courseware







3

6





4 5



Manual content

) Project 1: Principles

) Project 2: Switching Off

) Project 3: two-way switching

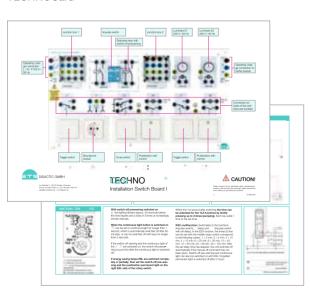
Project 4: Economy Changeover switch with socket

Project 5: Changeover Circuit with Indicator light

) Project 6: Pushbutton Circuit

) Project 7: staircaise Circuits

TECHNOCard®



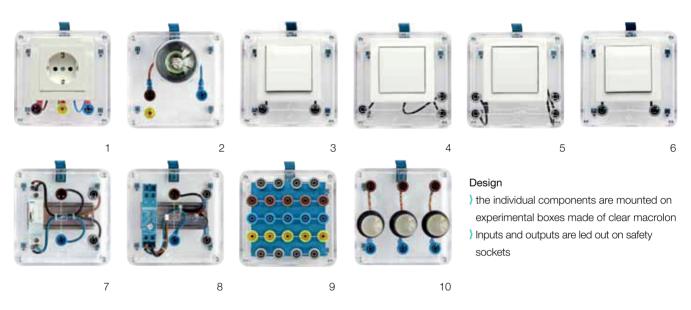
the tECHnoCards ® are a practical supplement to the train ing system. on them, the trainee finds a kind of knowledge store in concentrated, clear form for constant reference during prac tical work.

-) Display board in 303mm x 426mm format
-) Double-sided color design
-) Robust, hard-wearing quality



Installation tECHnoloGY

Experimental boxes



No.	Designation	Order No.
	Installation Technology, basic equipment ,13 pieces	20396
1	1 Protective contact sockets	20308
2	1 lamp holder E27 with incandescent lamp 60 W / 230 V1 $$	20301
3	1 Circuit breaker 1-pole	20314
4	2 Changeover switch	20315

5	1 Cross switch	20317
6	2 Pushbutton without symbol 20318	
7	1 Impulse relay 230 V, 1 no contact	20322
8	1 staircase relay 8230 V, 130 min 20323	
9	2 Junction boxes	20324
10	1 lamp holder 3-fold E14 with incadescent lamp 230 V/25W	20325

accessories







No.	Designation	Order No.
1	Exchangable perforated plate wall, stainless steel, 766 x 687 x 45 mm	89217
2	Exchangable perforated plate wall, stainless steel, 766 x 312 x 45 mm	89218
3	trough insert for experiment boxes	20999
4	Experiment box, empty, 122 x 122 x 62 mm; consisting of: body, lid, safety hooks, 4 fastening hooks	20016
5	Experiment box, empty, 200 x 122 x 62 mm; consisting of: body, lid, safety hooks, 4 fastening hooks	20017
6	set of fastening hooks for experimental boxes, 40 pcs.	20014
n.ill.	set of clickers (safety hooks) for experimental boxes, 10 pcs.	20015

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standard commercial installation



Application example

Circuit components from set 20020 mounted on stainless steel exchangeable perforated plate wall (766 x 687 x 45 mm)



Set of circuit components for mounting on grid wall:

-) 1 Off switch
-) 1 series switch
-) 2 Changeover switch
-) 1 Cross switch
-) 3 Pushbutton with light symbol
-) 1 schuko socket
-) 2 schuko plug
-) 3 Junction boxes
-) 3 Control lamps
- 3 Incandescent lamps 230 V / 5 W
-) 1 staircase vending machine
-) 1 Impulse relay
-) 4 Fluorescent lamp sockets
-) 2 starter sockets
-) 4 starter (duo and tandem circuit)
-) 2 Ballasts 18 W
-) 1 Ballasts 36 W
- 2 Fluorescent lamps with splinter protection 18 W
-) 1 Capacitor 3.6 µF, 420 V
-) 1 Capacitor 4. 5 μF, 250 V
-) 2 Mounting bracket for capacitor
-) 1 Pushbutton I o II
-) 3 Contactors 230 V 3-pol. 2s / 2Ö
-) 2 top-hat rails
-) 1 t ime relay on-delay
-) 30 Pressure clamps
-) 1 set of fastening material
-) 1 set of plug terminals
-) 2 trough trays with 13 compartments for storage

No.	Designation	Order No.
1	set of circuit components	20020



Installation tECHnoloGY

Bst ®ailding systems rainer



Learning objectives

-) selection of the correct installation lines
-) Cutting the installation lines to length
-) Selection and installation of flash-mounted components
-) Drawing of installation plans, circuit diagrams
-) Checking the installation according to DIn VDE

BST®-BuildingSystemsTrainer Installation Technology

Flush-mounted installation consisting of:

-) Practice wall with flush-mounted boxes and empty conduits for setting up usual circuits with standard flush-mounted installation materials, using the example of a 3-story building
-) sub-distribution board, 1-row

6

No.	Designation	Order No.
1	Bst ®-Buildings ystemst rainer - Installation t echnology	43504
2	training stand Bst ® 1800	43501

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Installation material sets



2 and 3



Grid Plates/screws/Dowels



5

Components and equipment set consisting of:

-) 2 x off and changeover switches
- 1 x cross switch
- 1 x light strip
-) 1 x fluorescent tube
-) 1 x junction box
-) 3 x push button
-) 1 x socket
-) 1 x CEE socket
-) 1 x small distribution box aP, 3-row
-) 1 x residual, current circuit breaker
-) 1 x lss B16a, 3-pole
- 1 x lss B16a ,1-pole
-) 1 x lss B10a, 1-pole
-) 1 x remote switch
- 1 x phase bar
-) 1 x main line branch terminals
- 1 x busbar with terminals
- 1 x set of accessories

No.	Designation	Order No.
1	Mobile I earn trainer (Mlt) as a double workstation for project work (accessories)	89200
2	Installation and material set: components and equipment set	42213
3	Installation and material set: cable and wiring set	42214
4	Interchangeable perforated plate wall for hanging in front of experimental frames of the Mlt (766 x 687 x 45 mm)	89217
5	Dln a4 interchangeable perforated sheet wall for hanging up experimental frame (540 x 297 mm)	89214
n.ill.	set of dowels 5/10 (100 s tk./set)	0D90203
n.ill.	set of dowels 5/5 (250 s tk./set)	0D90204-01
6	set of assembly accessories, consisting of: - special dowels 5 x 5 mm, 100 pcs special dowels 5 x 10 mm, 100 pcs screws 3.5 x 12 mm, 100 pcs screws 3.5 x 20 mm, 100 pcs screws 3.5 x 30 mm, 100 pcs.	90055



Qty.	Designation	Order No.
	Installation switch Board I	43109
	set of Ets ring binders	91904
	Installation t echnology – Instructor's Manual	43135CD-EnG
	Installation t echnology – s tudent Manual	43136CD-EnG
	Installation t echnology – Presentation aids	43137CD-EnG
	Installation t echnology – Commissioning and t roubleshooting	42202CD-EnG
	tECHnoCard ® – Installation switch Board	43168-EnG
	Installation t echnology, basic equipment - 13-pieces	20396
	Exchangable perforated plate wall, stainless steel 766 x 687 x 45 mm	89217
	Exchangable perforated plate wall, stainless steel 766 x 312 x 45 mm	89218
	trough insert for experiment boxes	20999
	Experiment box empty, 122 x 122 x 62 mm, consisting of: body, lid, safety hooks, fastening hooks	20016
	Experiment box empty, 200 x 122 x 62 mm, consisting of: body, lid, safety hooks, fastening hooks	20017
	set of clickers for experiment boxes (safety hooks), 10 pcs.	20015
	Set of feet for experiment boxes (fixing hooks), 40 pcs.	20014
	set of circuit components for mounting on grid wall	20020
	Bst ® – Buildings ystemst rainer – Installation t echnology	43504
	training level Bst ® 1800	43501
	Mobile I earn trainer (Mt)	89200
	Installation and material set: components and equipment set	42213
	4 mm safety test lead set, 30 pieces	90009
	Installation and material set: cable and wiring set	42214
	Interchangable perforated plate wall for hanging in front of experimental frames of the Mlt	89217
	Dln a4 interchangable perforated sheet wall for hanging up experimental frame	89214



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Concessionario —
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