















# M TOOLS

M

	Wire / Cable strippers	M-1...2	Jokari
	Cable knives / Multifunction tools	M-2	Jokari
	Hand operated crimping tools	M-3 M-3 M-3 M-3 M-4	Pressmaster Z&F Cembre Jeesoon Rennsteig
	Automatic cable preparation machines	M-4	GLW
	Hydraulic crimping / Cutting tools	M-5	Cembre
	Battery operated crimping tools	M-6	Cembre
	Die sets for crimping tools	M-7	Cembre
	DIN rail cutter	M-8	GLW
	Wire duct / Trunking cutter	M-8	Micoel
	Portable tester / Multimeter	M-9	Chauvin Arnoux
	Clamp testers	M-10	Chauvin Arnoux
	Portable network analyser / Logger	M-11	Chauvin Arnoux
	Thermal camera	M-12	Chauvin Arnoux
	Electrical installation tester	M-13	Chauvin Arnoux



30900



20100



20050



20090



30120

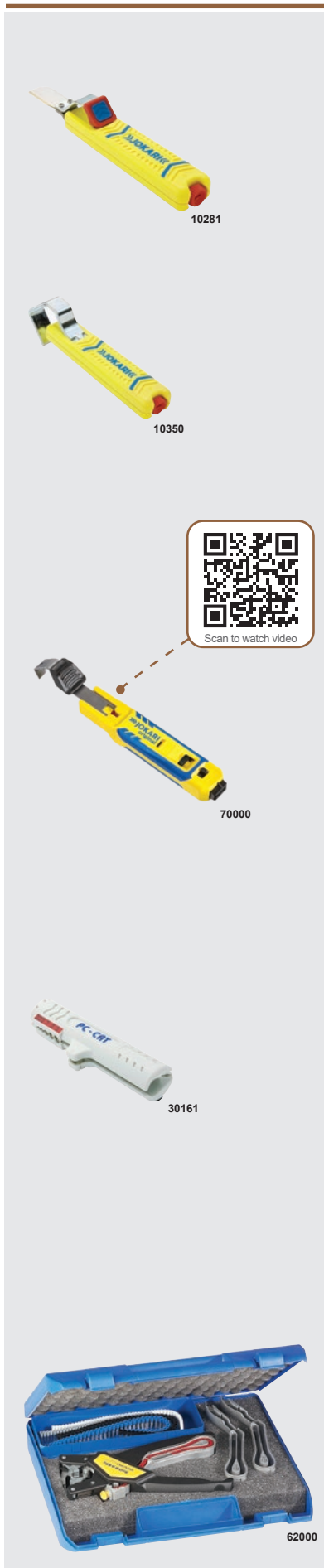
**Jokari** a market leader in stripping technology for all types of wires, cables and conductors. Producing professional tools for most application areas in which wires must be processed easily, quickly and safely. All cable knives, cable and wire strippers are TÜV- and GS-certified.

- Highest standards of workmanship and material
- Durable, reliable performance guaranteed
- Complete quality assurance



**Wire strippers**

type	tool name	description	wire size	price
<b>Allrounder</b> <i>for stripping of standard round and flat cables up to Ø 15 mm</i>				
For removing of the coating, longitudinal sections, stripping of solid or flexible wires for exposing of wire lengths for specific connections, and a broad working range.				
<ul style="list-style-type: none"> <li>• Round cables Ø 4...15 mm, Flat cables max. 15 mm wide and flexible wire 1.5...50 mm<sup>2</sup></li> <li>• Extra blade for longitudinal cut. 2 stripping notches with length stop for stripping conductors</li> <li>• Removable length stop, suitable for left and right hand use, can be stored in the tool handle.</li> </ul>				
30900	<b>Allrounder</b>	universal stripper for round and flat cables	Ø 4 - 15 mm	<b>460.02</b>
<b>Secura 2K</b> <i>soft grip (professional wire stripper)</i>				
Automatic wire stripper for single, multiple and fine stranded cables 0.2...6.0 mm <sup>2</sup> with std insulation.				
<ul style="list-style-type: none"> <li>• No adjustment necessary for different cross-sections</li> <li>• Integrated safety wire cutter for wires up to 2.5 mm<sup>2</sup></li> <li>• Strip length stopper adjustable 6 to 18 mm</li> <li>• Ergonomic security soft grip handle (<i>non-tiring long operation</i>)</li> </ul>				
20100	<b>Secura 2K</b>	soft-grip wire stripper ( <i>incorporating cutter</i> )	0.2 - 6 mm <sup>2</sup>	<b>943.03</b>
29100		spare blade set for above soft-grip stripper		<b>402.52</b>
<b>Super 4 plus</b> <i>wire stripper (econo version)</i>				
<ul style="list-style-type: none"> <li>• Automatic wire stripper for solid and standard wires 0.2 - 6 mm<sup>2</sup></li> <li>• Integrated safety cutter for wires up to max. 2.5 mm<sup>2</sup></li> <li>• Strip length stopper adjustable: 6 to 15 mm</li> <li>• No adjustment necessary for different cross-sections</li> </ul>				
20050	<b>Super 4 plus</b>	econo wire stripper ( <i>incorporating wire cutter</i> )	0.2 - 6 mm <sup>2</sup>	<b>514.07</b>
<b>No. 6-16</b> <i>stripper for larger wire sizes 6 - 16 mm<sup>2</sup></i>				
Suitable for solid and stranded conductors 6...16 mm <sup>2</sup> for removing the outer sheath from PVC-Flex.				
<ul style="list-style-type: none"> <li>• Automatic wire stripper suitable for wires 6 - 16 mm<sup>2</sup> (<i>no adjustments required</i>)</li> <li>• Special cut permits removal of outer sheath of 3 core-flex 3 x 0.75 mm and solar cables</li> <li>• Adjustable strip length: 15 - 18 - 20 mm</li> </ul>				
20090	<b>No.6-16</b>	wire stripper for larger cross-section wires	6 - 16 mm <sup>2</sup>	<b>1 574.40</b>
<b>Universal No.12 - Cable stripper</b>				
For quick, precise cable stripping of all common round and multicore cables Ø 8...13 mm.				
<ul style="list-style-type: none"> <li>• No adjustment of cutting depth necessary</li> <li>• Ideal for cable stripping confined spaces such as in junction boxes</li> <li>• Blades with special Titanium-Nitride coating (TIN) to achieve longer life, faster cutting and less wear</li> </ul>				
30120	<b>Universal No.12</b>	universal for all round cables ( <i>no adjustment</i> )	Ø 8 - 13 mm	<b>347.32</b>
<b>Secura No.15 - Super stripper</b>				
<ul style="list-style-type: none"> <li>• No cutting depth adjustments required</li> <li>• Integrated, multi-functional slide-out blade</li> <li>• Locking mechanism prevents unwanted opening of the tool</li> <li>• Absolutely straight-forward longitudinal cuts - with innovative internal cable duct</li> <li>• Special outlined blades for effortless stripping of wires of diameters 0.2 - 0.3 - 0.8 - 1.5 - 2.5 - 4.0 mm<sup>2</sup></li> </ul>				
30155	<b>Secura No.15</b>	same as No.12 + wire stripper 0.2...4 mm <sup>2</sup> and blade	Ø 8 - 13 mm	<b>757.88</b>
<b>Flat cable stripper</b>				
For PVC insulated and sheathed cables e.g. Twin Flat Cable 2 x 1/1.5/2.5 mm <sup>2</sup>				
Twin and Earth Cable 3 x 1.0 mm <sup>2</sup> , 3 x 1.5 mm <sup>2</sup> , 3 x 2.5 mm <sup>2</sup>				
<ul style="list-style-type: none"> <li>• Removes outer sheath and inner conductor insulation (<i>no adjustment necessary</i>)</li> <li>• Adjustable strip length: 15 - 18 - 20 mm</li> </ul>				
20030	<b>EM-Set FKZ</b>	for flat twin and twin + earth cables	0.75...2.5 mm <sup>2</sup>	<b>1 431.80</b>



**Specialised wire strippers**

- Highest standards of workmanship and material - durable, reliable performance guaranteed
- Blades with special Titanium-Nitride coating (TIN) to achieve longer life, faster cutting and less wear

type	tool name	description	wire Ø	price
------	-----------	-------------	--------	-------

**Cable knives** *cable knife contains spare blade (inside handle)*

- For stripping outer sheath from all standard round cables
- Automatic swivel blade (*screw adjustable for cutting depth*)

10160	<b>Secura No.16</b>	cable knife ( <i>adjustable blade depth</i> )	4 - 16 mm	<b>318.56</b>
10280	<b>Secura No.28H</b>	cable knife with additional hooked blade	8 - 28 mm	<b>347.32</b>
10281	<b>Secura No.28G</b>	cable knife with additional straight blade	8 - 28 mm	<b>347.32</b>
10350	<b>No.35</b>	standard cable knife ( <i>adjustable blade depth</i> )	27 - 35 mm	<b>533.62</b>
19000	-	spare blade for above cable knives	(3 pc set)	<b>328.92</b>

**Cable knife system 4-70** *with newly developed hook blade protection mechanism*

- Bracket change system permits stripping of cables from Ø 4...70 mm diameter with just one tool
- Perfect ergonomic design ensures easy, comfortable handling

70000	<b>System 4-70</b>	knife with protected hook blade with bracket No. 28	8 - 28 mm	<b>1 152.34</b>
79016	<b>Bracket No. 16</b>	bracket for system 4 - 70 for cables with diameter	4 - 16 mm	<b>305.91</b>
79035	<b>Bracket No. 35</b>	bracket for system 4 - 70 for cables with diameter	27 - 35 mm	<b>349.62</b>
79050	<b>Bracket No. 50</b>	bracket for system 4 - 70 for cables with diameter	35 - 50 mm	<b>349.62</b>
79070	<b>Bracket No. 70</b>	bracket for system 4 - 70 for cables with diameter	50 - 70 mm	<b>349.62</b>
19000	-	spare blade for above cable knives	(3 pc set)	<b>328.92</b>

**Coax cable strippers** *for coaxial cables*

**Secura Coaxi No.1**, strips coaxial cables in two easy and quick motions, stripping the outer sheathing and inner dielectric coat precisely without any damage to the wires or essential shielding.

- Quick, easy stripping of coaxial cable types - TV antenna cables, RG58/59, PVC-Flex 3 x 0.75 mm<sup>2</sup>
- No adjustment necessary, without damaging the inner metal shield

30600	<b>Coaxi No. 1</b>	Coax/RG59/59, CAT and PVC cables 3 x 0.75 mm <sup>2</sup>	Ø 4.8 - 7.5 mm	<b>379.52</b>
-------	--------------------	---	----------------	---------------

**PC-Strip** *for PVC-insulated data communications and control cables*

Special sheathing and insulation stripping tool for PVC-insulated data communications and control cables.

- No adjustment of cutting depth necessary (*wire stripping range 0.2 - 4.0 mm<sup>2</sup>*)

30160	<b>PC-Strip</b>	data/network/printer/control cables 0.2...4 mm <sup>2</sup>	Ø 5 - 15 mm	<b>863.68</b>
-------	-----------------	---	-------------	---------------

**PC-CAT** *for CAT5, CAT6, CAT7, Twisted-Pair-Cable*

For PVC-insulated data communications and control cables Cat5, Cat6, Cat7, twisted-pair, network and thinly insulated cables. Also for stripping individual wires (0.2...0.8 mm<sup>2</sup>)

- No adjustment of cutting depth necessary (*wire stripping range: 0.2...0.8 mm<sup>2</sup>*)
- Integrated, multi-functional slide-out blade

30161	<b>PC-CAT</b>	CAT5 / 6 / 7 cable or twisted pair 0.2...4 mm <sup>2</sup>	Ø 4.5 - 10 mm	<b>691.18</b>
-------	---------------	--	---------------	---------------

**SE-Strip** *for standard energy and security cables, double shielded solar cables*

For all common security, energy cables and double shielded solar cables with convenient pocket clip.

- No adjustment of cutting depth necessary
- Included wire stopper / length scale 8 - 10 - 12 mm

30190	<b>SE-Strip 2.5-6</b>	energy/double shielded solar cable Ø7.5...9.5 mm	2.5/4/6 mm <sup>2</sup>	<b>668.18</b>
30200	<b>SE-Strip 10/16</b>	energy/double shielded solar cable Ø 11...13 mm	10 - 16 mm <sup>2</sup>	<b>668.18</b>

**Quadro Plus** *4 functions in one - cutting - twisting - stripping - crimping*

Ergonomic, automatic wire stripper and crimping pliers for wires from 0.5...2.5 mm<sup>2</sup> wire stopper for perfect length, for quick precise stripping and crimping on insulated sleeves.

- Self adjusting blades cause no damage to conductors
- Integrated twisting device prevents splaying of wire strands
- Trapezium crimping to VDE 0609
- Cartridge accepts insulated ferrules (*in strips*) 0.5...2.5 mm<sup>2</sup>
- Incorporated side cutter for wires up to 2.5 mm<sup>2</sup>

62000	<b>Quadro</b>	insulated carrying case with 2 spare cartridges	0.5 - 2.5 mm <sup>2</sup>	<b>5 813.44</b>
60100	-	spare quick-change cartridges for Quadro tool	-	<b>244.96</b>



**Manual crimping tools for wire ferrules (bootlace terminals)**

Proteus 10S - Professional self-adjusting crimping tool providing a square crimp cross section suitable for wire ferrules 0.14...10 mm<sup>2</sup>. Ergonomically shaped handles with selected surface textures for comfortable, frequent use.

- Professional self-adjusting crimping tool providing a square crimp profile on wire ferrules
- Full cycle ratchet mechanism ensuring consistent, reliable crimp (*release on completion of crimping operation*)
- Ergonomic handles, light weight, low handle force and optimum opening for comfortable crimping
- Release lever to clear miscrimps and obstructions (*releases jaws before completion of crimp*)
- Non-slip rubber grip pad for applying pressure against a surface

type	for terminals	conductor (mm <sup>2</sup> )	cable entry	description	price
------	---------------	------------------------------	-------------	-------------	-------

**Pressmaster - Professional self-adjusting crimping tool**

- High precision die geometry for a clearly defined square crimp shape of the ferrule
- Automatic self-adjustment to required wire size

4300-4661	ferrules	0.14...10	side	professional self-adjusting crimping tool	3 167.20
-----------	----------	-----------	------	---	----------

**Mobile frame system - with interchangeable dies for various terminals**

Lightweight, compact ratchet crimp tool designed for most types of mechanical, electrical and electronic connectors. Easily interchangeable crimp dies are kept together with a special pin to simplify handling.

- Reliable crimping performance consistent and accurate with a parallel action stroke.
- Easy-access release for fast, simple exchange of crimp dies (*no special tools required*)

4300-3149	die dependant		side	MCT frame only for interchangeable dies	826.88
-----------	---------------	--	------	---	--------

**Interchangeable die sets for above tool frame**

- A wide range of crimp dies to cover all applications in just one tool frame.
- Dies are kept in pairs and delivered in a modular reusable box.

4300-3129	insulated	0.5 to 2.4	side	red/blue insulated terminal crimping die set	592.27
4300-3128	insulated	4 to 6	side	yellow insulated terminal crimping die set	592.27
4300-3137	uninsulated	0.75 to 2.5	side	cable lug crimping die set	507.17
4300-3139	uninsulated	4 to 10	side	cable lug crimping die set	507.17
4300-3127	end sleeves	0.25 to 10	side	wire end sleeve crimping die set	507.17
4300-3153	end sleeves	16 to 25	side	wire end sleeve crimping die set	1 645.71
4300-3154	end sleeves	35 to 50	side	wire end sleeve crimping die set	507.17
4300-3146	open barrel	0.5 to 6	side	open barrel connector crimping die set	2 472.58
4300-3136	coaxial	RG58/59/62/71	side	coaxial connector crimping die set	1 645.71

**Z&F - Crimping tools (for insulated and uninsulated ferrules)**

Crimpit 2.4	end sleeves	0.5 to 2.4		economic crimping tool ( <i>front and side entry</i> )	1 024.69
-------------	-------------	------------	--	--	----------

**Crimping tool with ratchet closing control**

Crimpit F6L	end sleeves	0.5 to 6	side	crimping tool for wire end ferrules ( <i>5 profiles</i> )	1 637.66
Crimpit F16L	end sleeves	6 to 16	side	crimping tool for wire end ferrules ( <i>3 profiles</i> )	1 637.66
Crimpit F25L	end sleeves	6 to 25	side	crimping tool for wire end ferrules ( <i>4 profiles</i> )	1 741.16
Crimpit F50L	end sleeves	35 to 50	side	crimping tool for wire end ferrules ( <i>2 profiles</i> )	1 741.16

**Crimpit IT6L (for pre-insulated cable lugs)**

- Crimping tool for PVC, PC and DPA insulated lugs, with ratchet closing control
- Crimping profiles for different wire cross-sections (*red/blue/yellow*)

Crimpit IT6L	insulated	0.5 to 6	side	crimping tool for pre-insulated lugs ( <i>3 profiles</i> )	1 615.81
--------------	-----------	----------	------	--	----------

**Jeesoon - Crimping tool for pre-insulated terminals**

- With ratchet closing control
- Crimping profiles for different wire cross-sections (*red/blue/yellow*)

JSL 1305-1	insulated	0.5 to 6	side	crimping tool for pre-insulated terminals	856.78
------------	-----------	----------	------	---	--------

**Cembre - Crimpstar range - Ratchet crimping tools**

- Ergonomically designed non-slip moulded plastic grips
- Factory-set ratchet for crimping control (*automatic release on completion of crimping operation*)
- Emergency release lever (*releases jaws before completion of crimp*)

HP3	insulated	0.25 to 6	side	red/blue/yellow ratchet crimping tool	1 906.76
HNN3	insulated	1.5 to 10	side	manual indent ratchet crimping tool	2 141.37
HNN4	insulated	10 to 16	side	manual indent ratchet crimping tool	2 037.87
HN-A25	uninsulated	10 to 25	side	manual hexagona ratchet crimping tool	3 455.86
HNKE4	end sleeves	0.5 to 4	side	wire end sleeve crimping tool	2 455.33
HNKE16	end sleeves	4 to 16	side	wire end sleeve crimping tool	2 455.33
HNKE50	end sleeves	25 to 50	side	wire end sleeve crimping tool	3 785.92



**Professional hand tools for cable preparation**

type	wire sizes mm <sup>2</sup>	tool length	description	dimensions (mm)			price
				H	W	D	

**Cable shears (cutters)**

- For cutting single/multi-strand and fine wire aluminium and copper cables
- Easy, clean cut with one hand operation - no crushing or deformation of cables

<b>700 015 36</b>	Cu 70	170 mm	cable shears for stranded conductors up to 70 mm <sup>2</sup>				<b>882.08</b>
-------------------	-------	--------	---	--	--	--	---------------

**Professional scissors** *supplied with carry case and swivel belt hook*

**Robust-A** professional scissors with special steel frame for high resistance and a long life

- Safe and easy operation even when wearing work gloves
- Dual compound material - soft rubber inserts to maximise grip
- Extremely lightweight and robust for safe, easy handling and comfort
- Easy cutting of conductors up to 50 mm<sup>2</sup> using the shaped grooves in each blade

<b>SC5X</b>	scissors		professional workmans scissors	162	77	18	<b>640.58</b>
-------------	----------	--	--------------------------------	-----	----	----	---------------

**Crimping tools for insulated and uninsulated ferrules (bootlace terminals)**

Entry-level crimping tool for 0.25 – 2.5 mm<sup>2</sup> ferrules PE 7.1

- Forged body - milled trapezoidal crimp profile

<b>610 001 0</b>	0.25...2.5	150 mm	entry-level crimping tool for ferrules 0.25...2.5 mm <sup>2</sup>				<b>694.63</b>
------------------	------------	--------	---	--	--	--	---------------

**Professional crimping tool for 0.08 - 16 mm<sup>2</sup> ferrules** **PEW 8.185 / PEW8.87**

- The established, patented tool further improved
- High-precision die geometry leads to a clearly defined square crimp shape of the ferrule
- Automatic self-adjustment to requested wire size

<b>610 185 3</b>	0.08-16	side entry	professional crimping tool for ferrules 0.08 - 16 mm <sup>2</sup>				<b>4 626.60</b>
------------------	---------	------------	---	--	--	--	-----------------

<b>610 087 3</b>	0.08-10	front entry	professional crimping tool for ferrules 0.08 - 10 mm <sup>2</sup>				<b>4 696.75</b>
------------------	---------	-------------	---	--	--	--	-----------------

**Automatic machines for cable preparation**

type	wire sizes (mm <sup>2</sup> )	measuring length (mm)	description	dimensions (mm)			price
				H	W	D	

**Cable cutting machine**

*supply voltage 100...240 VAC 50/60Hz*

**LC 100** offers significant potential savings. Measuring and transport rollers automatically adjust to wire diameter on insertion. Enter the desired length and quantity on the control panel and the production can begin. Included software enables recurring cutting jobs to be saved as projects.

- Easy to use, faster material change
- Cable cross-section is automatically detected
- Simple and fast data entry via clear graphical display and control panel
- High measuring accuracy through separate measuring and transporting roller

<b>LC 100</b>	0.8..10	2...1000 met	automatic wire cutter	194	228	301	<b>95 176.98</b>
---------------	---------	--------------	-----------------------	-----	-----	-----	------------------

**CS 60 - Stripping machine**

*supply voltage - 230 VAC 50Hz*

**CS 60** settings are made by large user-friendly dials. A graphic display indicates values entered within seconds, the cross section settings and stripping length are performed. Insulation of cables not fully stripped to prevent fanning of the wire strands.

- Mobile use by carrying handle
- Fast setting of length and cross section
- Large graphic display facilitates adjustment
- The automatic clamping force adjustment protects sensitive insulations

<b>CS 60</b>	0.8...6	2...20 mm	automatic wire stripper	221	141	363	<b>92 899.91</b>
--------------	---------	-----------	-------------------------	-----	-----	-----	------------------

**Stripping and crimping machines (combined)**

type	wire sizes mm <sup>2</sup>	crimping length (mm)	description	dimensions (mm)			price
				H	W	D	

**Electric stripping and crimping machine**

*supply voltage - 230 VAC 50Hz*

Wire stripping and crimping done in one operation using belt strip ferrules in type K box dispensers Controlled by a sophisticated cam mechanism achieving a stable working process.

- Cycle time: 1.5s
- Easy to use, silent operation
- Cross-sectional change in a few simple steps.

<b>MC 25</b>	0.25...2.5	8 mm	automatic stripper/crimper	270	165	320	<b>189 410.93</b>
--------------	------------	------	----------------------------	-----	-----	-----	-------------------



**Hydraulic crimping / cutting tools**

type	for terminals	conductor (mm <sup>2</sup> )	crimping force (kN)	description	price
<b>HT and TC series - Hydraulic tools</b> <i>lightweight and compact</i>					
<ul style="list-style-type: none"> <li>• Spring loaded handles, dies can be advanced using only one hand</li> <li>• Pressure release system can easily be operated at any stage of compression</li> <li>• For ease of operation and comfort of operator, tool head can be fully rotated 180°</li> <li>• Supplied with sturdy plastic carrying case for tool with compartments. (for dies, see page M-7)</li> </ul>					
<b>HT45 compact hydraulic crimping tool</b>					
HT45-E	die dependant	max. 150	50 kN	hydraulic crimping tool	17 791.06
<b>HT51 -2 speed hydraulic crimping tool</b>					
<ul style="list-style-type: none"> <li>• Supplied with sturdy plastic carrying case for tool and (included) die sets: ME 5-50, 7-50, 10-50, 14-50, 19-50, 24-50, 30-50, 37-50</li> </ul>					
KITHT51-1	die dependant	max. 240	50 kN	hydraulic crimping tool	29 302.92
<b>HT131 hydraulic crimping tool for semi-circular slotted dies</b>					
<ul style="list-style-type: none"> <li>• Supplied with sturdy plastic carrying case for tool and (included) die sets: ME 10-C, 14-C, 19-C, 24-C, 30-C, 37-C, 48-C</li> </ul>					
KITHT131-C-1	die dependant	max. 400	130 kN	hydraulic crimping tool	40 975.79
<b>RH series - Hydraulic presshead</b>					
Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max.					
RHC131	die dependant	max. 400	130 kN	hydraulic presshead only	17 756.56
<b>TC series - Hydraulic cutting tool</b>					
Hand operated hydraulic tool specifically designed to cut Copper, Aluminium-Steel cables. Double speed action: a fast advancing speed for rapid approach of blades to cable and a slower more powerful speed for cutting.					
<ul style="list-style-type: none"> <li>• HT-TC... can cut copper, aldreyl, aluminium, aluminium-steel cables and steel ropes and steel rods</li> </ul>					
type	max. cutting diameter Ø	length	width	description	price
<b>TC026 compact hydraulic cutting tool</b> <i>supplied with canvas carrying bag for tool</i>					
HT-TC026	Ø 25 mm	382 mm	129 mm	hydraulic cutting tool	26 048.32
<b>TC series -2 speed hydraulic cutting tool</b> <i>supplied with plastic carrying case for tool</i>					
HT-TC041N	Ø 45 mm	550 mm	144 mm	hydraulic cutting tool	35 099.10
<b>TC series hydraulic cutting head</b> <i>supplied with canvas carrying bag for tool</i>					
Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 700 bar max.					
TC050	Ø 50 mm	325 mm	112 mm	hydraulic cutting head	29 509.93
<i>Larger sizes available on request.</i>					
<b>Hydraulic foot operated pump</b>					
<ul style="list-style-type: none"> <li>• Pressure release can easily be operated at any stage of compression</li> <li>• Supplied with 3 meter long high pressure flexible hose with self-lock quick coupler</li> </ul>					
<b>PO - Foot operated double speed pump</b> <i>develops a maximum pressure of 700 bar</i>					
<ul style="list-style-type: none"> <li>• Supplied with solid shaped stand providing stability during operation</li> <li>• Supplied with sturdy plastic carrying case for tool</li> </ul>					
PO7000	700 BAR	680 mm	200 mm	hydraulic foot operated pump	32 385.02
<b>Manual crimping tool</b>					
<ul style="list-style-type: none"> <li>• Heat treated steel crimp jaws</li> <li>• Handles of anti-slip plastic with hilt</li> </ul>					
<b>TN series (indent crimp)</b> <i>adjustable for different conductor sizes</i>					
<ul style="list-style-type: none"> <li>• Easily adjustable die positioning by knurled screw and reference vernier scale</li> </ul>					
TN70SE	uninsulated	6 to 70	indent	adjustable manual crimping tool	6 327.50
TN120SE	uninsulated	10 to 120	indent	adjustable manual crimping tool	7 424.64



B450ND-BV



KITB500-1



KITB1300-C-1



B1300PL



UKC4

**Battery operated crimping tools**

**Cordless hydraulic crimping tools (18.0 V Li-Ion high power batteries)**

- Pressure release button
- Extremely quiet, minimal vibration
- One hand operation, improved balance for better handling
- Tool head rotates 180° for ease of operation in confined spaces
- Durable moulded body with high resistance to wear and damage in all operating conditions

type	for terminals	conductor (mm <sup>2</sup> )	crimping force (kN)	description	price
------	---------------	------------------------------	---------------------	-------------	-------

**B450ND-BV series - "Inline" type crimping tool**

B450ND-BV is a new generation of hand-held cordless tool suitable for crimping electrical connectors onto conductor cross sections up to 150 mm<sup>2</sup>. Quieter operation, illumination of the working area via LED lights and a minimum of vibration enhance the tool's practicality.

- LED light illuminating working area
- Wide opening head, ideal for derivations from running conductors
- One Li-Ion 18.0V 2.0Ah batteries and charger included (*indication of remaining battery life*)
- **Supplied with:**  
Plastic carrying case for tool, battery, charger and space for die sets

<b>B450ND-BV</b>	die dependant	max. 150	35 kN	battery operated crimping tool	<b>66 380.08</b>
------------------	---------------	----------	-------	--------------------------------	------------------

**B500 series - "Pistol grip" type crimping tool**

Designed with less weight and improved balance, B500 is easily manageable during the crimping process and, by the use of bi-component plastics, has a shell with high resistance to wear and damage.

- LED light illuminating working area
- Li-Ion 18.0V 5.2Ah high power battery
- Crimping cycle data stored (*up to 200.000 events*) in memory for later transfer to PC
- Digital display indicating: crimp pressure, available battery life, service/maintenance info
- **Supplied with:**  
Plastic carrying case for tool, 2 x battery, charger and (*included*) die sets:  
ME 5-50, 7-50, 10-50, 14-50, 19-50, 24-50, 30-50, 37-50

<b>KITB500-1</b>	die dependant	max. 300	60 kN	battery operated crimping tool	<b>68 588.15</b>
------------------	---------------	----------	-------	--------------------------------	------------------

**B1300 series - Portable crimping tool**

- LED light illuminating working area
- Li-Ion 18.0V 5.2Ah high power battery
- Crimping cycle data stored (*up to 200.000 events*) in memory for later transfer to PC
- Digital display indicating: crimp pressure, available battery life, service/maintenance information
- **Supplied with:**  
Plastic carrying case for tool, 2 x battery, charger and (*included*) die sets:  
ME 10-C, 14-C, 19-C, 24-C, 30-C, 37-C, 48-C

<b>KITB1300-C-1</b>	die dependant	max. 400	132 kN	battery operated crimping tool	<b>91 427.87</b>
---------------------	---------------	----------	--------	--------------------------------	------------------

*Die sets for crimping - see page M-7*

**Hydraulic pump (supplied with sturdy plastic carrying case for pump accessories)**

- Pressure release can easily be operated at any stage of compression
- **Supplied with:**  
0.9 meter long high pressure flexible hose with self-lock quick coupler

**B1300 -battery operated hydraulic pump *Li-Ion 18V 4 Ah battery (supplied)***

- Supplied with pump, battery and charger, 0.9m flexible hose with quick connector
- Plastic carrying case suitable for storing the pump, battery and charger and all accessories.











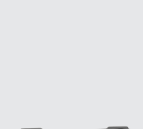


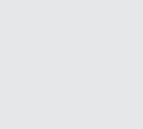
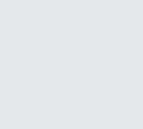
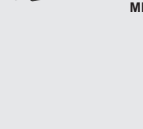

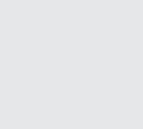

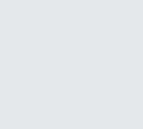
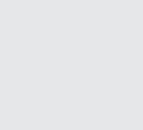
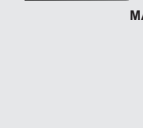




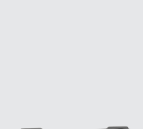


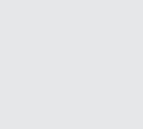
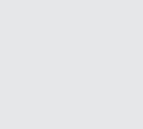

<b>B1300PL</b>	700 BAR	354 mm	240 mm	battery operated pump	<b>54 132.20</b>
----------------	---------	--------	--------	-----------------------	------------------

*Die sets for crimping - see page M-7*

**Universal key for switchboards**

- Equipped with:
- triangular shape 7 - 8 mm
  - double notch 3 - 5 mm
  - square shape 5 - 6 / 7 - 8 mm
  - screwdriver bit (*flat and star*) and hexagonal holder

<b>UKC4</b>	universal panel key square/triangle/double notch for switchboards (+ <i>screwdriver</i> )			<b>723.38</b>
-------------	---	--	--	---------------

Die sets for hydraulic and battery operated crimping tools						
type	for terminals	conductor (mm <sup>2</sup> )	crimping type	for crimping tool	price	
<b>Die sets for uninsulated terminals</b>						
 ME1	cable lugs	4...6	hexagonal		HT45-E 1 023.54	
 ME2	cable lugs	10	hexagonal		HT45-E 805.03	
 ME3	cable lugs	16	hexagonal		HT45-E 805.03	
 ME5	cable lugs	25	hexagonal		HT45-E 805.03	
 ME7	cable lugs	35	hexagonal		HT45-E 805.03	
 ME10	cable lugs	50	hexagonal		HT45-E 805.03	
 ME14	cable lugs	70	hexagonal		HT45-E 805.03	
 ME19	cable lugs	95	hexagonal		HT45-E 805.03	
 ME24	cable lugs	120	hexagonal		HT45-E 805.03	
 ME30	cable lugs	150	hexagonal		HT45-E 805.03	
 ME1-50	cable lugs	4...6	hexagonal		HT51/B450ND/B500 1 116.69	
 ME2-50	cable lugs	10	hexagonal		HT51/B450ND/B500 805.03	
 ME3-50	cable lugs	16	hexagonal		HT51/B450ND/B500 805.03	
 ME5-50	cable lugs	25	hexagonal		HT51/B450ND/B500 805.03	
 ME7-50	cable lugs	35	hexagonal		HT51/B450ND/B500 805.03	
 ME10-50	cable lugs	50	hexagonal		HT51/B450ND/B500 805.03	
 ME14-50	cable lugs	70	hexagonal		HT51/B450ND/B500 805.03	
 ME19-50	cable lugs	95	hexagonal		HT51/B450ND/B500 805.03	
 ME24L-50	cable lugs	120	hexagonal		B450ND 970.64	
 ME30L-50	cable lugs	150	hexagonal		B450ND 970.64	
 ME24-50	cable lugs	120	hexagonal		HT51/B500 970.64	
 ME30-50	cable lugs	150	hexagonal		HT51/B500 970.64	
 ME37-50	cable lugs	185	hexagonal		HT51/B500 970.64	
 ME48-50	cable lugs	240	hexagonal		HT51/B500 3 020.00	
 MA1-50	nest	4...6	indent			HT51/B450ND/B500 731.43
 MA2.3-50	nest	10	indent			HT51/B450ND/B500 731.43
 MA5-50	nest	25	indent	HT51/B450ND/B500 731.43		
 PA5-50	indentor	4...25	indent	HT51/B450ND/B500 2 177.02		
 MA7-50	nest	35	indent	HT51/B450ND/B500 713.03		
 MA10-50	nest	50	indent	HT51/B450ND/B500 713.03		
 PA10-50	indentor	35...50	indent	HT51/B450ND/B500 2 177.02		
 MA14-50	nest	70	indent	HT51/B450ND/B500 759.03		
 MA19-50	nest	95	indent	HT51/B450ND/B500 759.03		
 PA19-50	indentor	70...95	indent	HT51/B450ND/B500 2 177.02		
 MA24-50	nest	120	indent	HT51/B450ND/B500 713.03		
 PA24-50	indentor	120	indent	HT51/B450ND/B500 2 177.02		
 ME7-C	cable lugs	35	hexagonal		HT/RHC131/B1300 1 855.01	
 ME10-C	cable lugs	50	hexagonal		HT/RHC131/B1300 1 855.01	
 ME14-C	cable lugs	70	hexagonal		HT/RHC131/B1300 1 855.01	
 ME19-C	cable lugs	95	hexagonal		HT/RHC131/B1300 1 855.01	
 ME24-C	cable lugs	120	hexagonal		HT/RHC131/B1300 1 855.01	
 ME30-C	cable lugs	150	hexagonal		HT/RHC131/B1300 1 855.01	
 ME37-C	cable lugs	185	hexagonal		HT/RHC131/B1300 1 855.01	
 ME48-C	cable lugs	240	hexagonal		HT/RHC131/B1300 1 855.01	
 ME60-C	cable lugs	300	hexagonal		HT/RHC131/B1300 1 855.01	
 ME80-C	cable lugs	400	hexagonal		HT/RHC131/B1300 1 855.01	
 MA7-C	nest	35	indent		HT/RHC131/B1300 1 007.44	
 MA10-C	nest	50	indent		HT/RHC131/B1300 1 007.44	
 PA10-C	indentor	10...50	indent		HT/RHC131/B1300 2 219.57	
 MA14-C	nest	70	indent		HT/RHC131/B1300 1 007.44	
 MA19-C	nest	95	indent		HT/RHC131/B1300 1 007.44	
 MA24-C	nest	120	indent		HT/RHC131/B1300 1 007.44	
 PA24-C	indentor	70...120	indent		HT/RHC131/B1300 2 219.57	
 MA30-C	nest	150	indent		HT/RHC131/B1300 1 007.44	
 MA37-C	nest	185	indent		HT/RHC131/B1300 1 007.44	
 MA48-C	nest	240	indent		HT/RHC131/B1300 1 007.44	
 PA48-C	indentor	150...240	indent	HT/RHC131/B1300 2 219.57		
 MA60-C	nest	300	indent	HT/RHC131/B1300 1 718.16		
 PA60-C	indentor	300	indent	HT/RHC131/B1300 2 219.57		
<b>Die sets for insulated terminals</b>						
 MN2RF-50	cable lugs	10	radial		HT51/B450ND/B500 1 097.14	
 MN3RF-50	cable lugs	16	radial		HT51/B450ND/B500 1 097.14	
 MN5RF-50	cable lugs	25	radial		HT51/B450ND/B500 1 097.14	
 MN7RF-50	cable lugs	35	radial		HT51/B450ND/B500 1 097.14	
 MN10RF-50	cable lugs	50	radial		HT51/B450ND/B500 1 097.14	

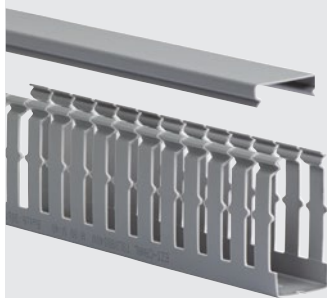




008328



VTC125



TSL040040N

**DIN rail cutter (professional)**

**DIN rail cutter** (for steel mounting rail only)

DIN rail is often cut by saw or angle grinder creating dust, noise and a considerable risk of injury. The **RC200** is a high quality, professional DIN rail cutter designed for high output, offering "burr-free" precision cutting and trimming of standard DIN rails.

- Increased work safety and quiet operation
- Quick and professional burr-free processing
- Metric scale plate and table clamp (optional)
- Incorporates two cut profiles (7.5 x 35 and 15 x 35 mm) DIN rails.
- Precision "burr-free" cut and trim of DIN rail to length without waste

type	rail cutter	for rail depth (mm)	description	price
------	-------------	---------------------	-------------	-------

**DIN rail cutter (professional)**

**RC200 DIN rail cutter** for DIN 35 rail 7.5 and 15 mm deep

<b>008328</b>	cutter	7.5 + 15	DIN rail cutter (2 profiles) for 7.5/15 mm high x 35 mm rail	<b>18 941.10</b>
---------------	--------	----------	--	------------------

**Accessories for above RC200 DIN rail cutter**

<b>009465</b>	scale	metric scale plate and length stop for above DIN rail cutter		RC200	<b>3 223.56</b>
<b>009102</b>	clamp	table clamp for above DIN rail cutter		RC200	<b>1 250.09</b>



Made in Italy

**Wiring duct cutter (professional)**

type	duct cutter	max. cut width	max. length stop	description	price
------	-------------	----------------	------------------	-------------	-------

**Bench mounting wiring duct (slotted trunking) cutter**

VTC125 provides fast, precise and burr-free cutting of wiring ducts, without leaving chips behind. It enables low-noise and emission-free working. The scale with length stop ensures the wiring ducts are cut to length quickly and with millimetre precision

For fast, accurate cutting of wiring ducts to lengths, without burrs and with very little force

- Blade guard guarantees secure operation
- Burr-free cut edges - No noise, no chips or dust
- Quick and easy cutting - ducts cut precisely to the millimetre
- Supplied with a 1 meter graduated dimension rule with length stop
- Hardened (replaceable) cutting blade - max. cutting width 125 mm

<b>VTC125</b>	cutter	125 mm	1000 mm	precision slotted wiring duct cutter	<b>20 367.14</b>
---------------	--------	--------	---------	--------------------------------------	------------------

**L-Termination and wiring**



**Ezi Canal** slotted cable ducting features an improved cover design for ease of opening and closing, permitting easy access to wiring in control panels.

- Simple open/close cover design for easy access to wiring in control panel
- Double score-line permits finger/slot or complete sidewall removal
- Coining process for burr-free edges to protect hands and wiring from abrasion

Standard colour: Grey - others available on request (volume dependant)

Standard length: Supplied in two meter lengths, complete with covers

type	dimensions (mm) (W) (H)	colour	description	slot A (mm)	finger B (mm)	carton qty (L - 2 m)	price each
------	----------------------------	--------	-------------	-------------	---------------	----------------------	------------

**Narrow slotted trunking** Finger: 6 mm / Slot - 4 mm (10 mm pitch)

- Narrow slot/finger design to closely fit spacing of high density terminal blocks and I/O modules

<b>KKC1518</b>	15	18	grey	PVC slotted cable trunking	5	7.5	112	see page L-11 for pricing.
<b>TSL025025N</b>	25	25	grey	PVC slotted cable trunking	4	6	48	
<b>TSL025040N</b>	25	40	grey	PVC slotted cable trunking	4	6	40	
<b>TSL040040N</b>	40	40	grey	PVC slotted cable trunking	4	6	24	
<b>TSL060040N</b>	60	40	grey	PVC slotted cable trunking	4	6	24	
<b>TSL080040N</b>	80	40	grey	PVC slotted cable trunking	4	6	18	



P01191773

**Voltage Absence Tester (VAT) CAT IV 1000 V**

Installations connected to an electricity distribution network, require measurements to be performed with power off to avoid electrical hazards (EN 50110-1 standard, DIN VDE 0682-401, NF C 18-510, etc.) Securing the installation to ensure that it is non-current-carrying, requires the use of a Voltage Absence Tester.

- **Comprehensive integrated autotest** - indication of type of fault also displays a text message for information.
- **IP65 protection** for indoor and outdoor use, significantly higher than the IP54 rating required by the standard.
- **Audible and visual continuity** indication up to 100 Ω, in compliance with standards recommendations.
- **Removable test probes** to meet specific requirements in certain applications (*various models available*)

**AC and DC voltage testing** Voltage detection takes priority, is automatic and indicated by distinct visual (*bargraph*) and intermittent beep. Stray voltages can be detected by pressing two buttons simultaneously to switch to low impedance mode.

**2-wire phase rotation with microprocessor** Simple and quick, the 2-wire phase rotation function with microprocessor is useful in all circumstances, including installations powered by an electrical generator set or behind an isolating transformer.

**Continuity and resistance testing** Checks that conductors are correctly connected. Continuity ( $R < 100 \Omega$ ) is indicated by a continuous audio signal whilst the resistance value is displayed directly.

**Residual Current Device (RCD) trip test up to 30 mA** By simultaneously pressing the double command, you can cause a fault current sufficient to trip the RCD to flow through a low-impedance load.

**Ergonomics specially designed for use in the field** Digital display, removable test probes ensure excellent handling. A built-in torch illuminates the point of measurement.

type	model	description	price
<b>Voltage Absence Tester IP65 enclosure 228 x 60 x 39 mm</b>			
Display:		LEDs + backlit digital display	
Voltage:		12 VAC - 1.000 VAC / 12 VDC - 1.400 VDC	
Impedance:		> 500 kΩ / Polarity indication	
Android application:		Not applicable	
RCD tripping:		By low-impedance load switching ( <i>approx.30 mA at 230 V</i> )	
Continuity & Resistance:		Buzzer trigger threshold 100 Ω typical ( <i>150 Ω max.</i> )	
Extended continuity test:		0.5 Ω to 2.999 kΩ	
Phase rotation:		2-wire type with microprocessor - Ph/Ph voltage 50 V - 1,000 VAC	
Buzzer:		Intermittent for Voltage Detection - Continuous for continuity	
Standards and elec safety:		IEC 61243-3:2009, EN 61243-3:2010, IEC 61010 1.000 V CAT I	
<b>Delivered with:</b>		<i>manual, set removable test probes, 2x 1.5 V LR03/AAA batteries, Velcro strap.</i>	
<b>P01191773</b>	<b>C.A.773</b>	CAT IV 1.000 V Voltage Absence Tester (VAT)	<b>5 027.96</b>



P01196773



P01298076

**Digital multimeter (CAT IV 600 V) IP54**

General-purpose professional measuring instrument with TRMS measurements (*sinusoidal, distorted and DC signals*) measurement accuracy, rugged design, reliability of an on-site instrument.

- Double backlit display
- Min/Max memorization
- Large 6000-count display
- Temperature and capacitance measurements

Display:	2 x 6000 counts, backlit
Bargraph:	(63 elements) Bi-mode ( <i>full scale / central zero</i> )
Acquisition:	TRMS AC / DC
Measurement rate:	5 measurements per second
Automatic / manual ranges:	Yes / Yes
AC/DC voltage:	600 mV / 6 / 60 / 600 / 1.000 V - accuracy 0.2% - 40Hz to 3kHz
LowZ AC voltage:	Low-impedance setting with Low-pass Filter
AC/DC current:	6.000 A / 10.00 A (20 A/30s)
Resistance measurement:	600 / 6.000 Ω / 60 / 600 kΩ / 6 / 60 MΩ, Audible continuity, Diode test
Frequency:	600 Hz / 6 kHz / 50 kHz
Capacitance:	8 cal.: 6.000 nF to 60.00 mF
Temperature:	-59.6 to +1.200°C / -4 to +2.192°F
Hold facility:	Yes Min / MAX (100 ms)
Min / MAX (100 ms):	Yes
Automatic power-off:	Yes ( <i>can be deactivated</i> )
Safety:	IEC 61010-1, IEC 61010-2-033 CAT IV 600 V / CAT III 1000V
Power supply:	1x 9 V 6LR61 battery
Dimensions / weight:	90 x 190 x 45 / 400 g

**Delivered with:** *Set leads, set test probes, 1x 9V 6LR61 battery, K thermocouple temp sensor*

<b>P01196773</b>	<b>C.A.5273</b>	digital multimeter hand held for all applications	<b>6 930.12</b>
------------------	-----------------	---	-----------------

**Accessories for above C.A.5273 multimeter**

<b>P01298076</b>		carrying bag with MultiFix multi-position mounting accessory	<b>1 114.39</b>
------------------	--	--	-----------------



P01120925



P01120947



785796

**Digital Power and harmonics clamp multimeter**

General-purpose professional clamp-on measuring instrument with True RMS measurement accuracy, reliable and particularly resistant to falls.

Clamping diameter:	<b>Ø34 mm</b>
Display:	Large 6000-count, backlit LCD screen
Amp (RMS)	AC 600 A DC, AC+DC 900 A
Volt AC (RMS)	AC 1000 V - 1%
Volt DC	DC, AC+DC 1400 V - 1%
Automatic AC/DC detection:	Yes (V and A)
Frequency for V/I:	Yes / Yes
Resistance measurement:	60 kΩ
Audible continuity:	Yes (< 1 Ω...599Ω)
Diode test:	(semi-conductor junction)
Temperature (type K):	-60.0 to +1000 °C
Power:	W, var, VA, PF Yes - single-phase and total three-phase
Harmonic analysis:	THDf / THDr
Phase rotation:	(2-wire method)
Motor-inrush function:	Yes
True-inrush function:	Yes
"Min / Max" / Peak function:	Yes / Yes
Auto Power off / "Hold" function:	Yes
Low battery indication:	Yes
Electrical safety as per:	IEC 61010 CAT IV 600V, CAT III 1000 V
Dimensions / weight:	78 x 222 x 42 / 340g

**Delivered with:** 1 set of PVC leads (black/red) with insulated elbowed male banana plug / insulated straight male banana plug, 2 test probes / insulated female plug (black/red) 1 safety crocodile clip (black) 1 x 9 V 6LR61 battery, 1 Multifix shoulder bag, mini-CD containing the User Manual.



type	model	description	price
P01120925	F205	digital clamp multimeter/tong tester for all applications	8 995.59

**Power and harmonics clamp multimeter IP54**

Current 1000 A, Voltage 1000 V, power, harmonics and recorder

Clamping diameter:	<b>Ø48 mm</b>
Display:	Large triple 10 000 count, backlit screen
Amp (RMS)	AC 150mA to 1000 A - 1% DC, AC+DC 150mA to 1500 A - 1%
Volt AC (RMS)	AC 100 mV to 1000 V - 1%
Volt DC	DC, AC+DC 100 mV to 1000 V - 1%
Automatic AC/DC detection:	Yes (V and A)
Resistance measurement:	100 kΩ (continuity buzzer)
Audible continuity:	Yes (< 40 Ω)
Frequency:	15Hz to 20kHz
Power:	W, VA, var Yes - single-phase and total three-phase
PF and cos φ (DPF):	Yes
Total Harmonic Distortion:	THDf % / THDr %
Harmonic decomposition:	Yes - up to 25th order
Crest factor (CF) / Motor InRush:	Yes
Current surge (True InRush):	Yes
"Min Max" / Peak function:	Yes / Yes
Auto power off / "Hold" function:	Yes
REC storage function:	Yes - (up to 3000 measurements)
Data logging:	Yes
PC / Bluetooth interface:	Yes
Electrical safety as per:	IEC 61010 CAT IV 1000V, CAT III 1000 V

**Delivered with:** Multifix shoulder bag, Power Analyser Transfer (PAT) software, 2 voltage leads (red/black), 2 test probes (red/black), 2 crocodile clips (red/black), 4x 1.5 V AA alkaline batteries, operating manual.

P01120947	F407	digital clamp multimeter/tong tester for all applications	14 490.46
-----------	------	---	-----------

**Accessories for above F205\F407 multimeters**

P01102100Z	mounting	hands free mounting clip	462.32
------------	----------	--------------------------	--------

**DEHNcare series - Safety protective gloves**

- Size (international): 8 - medium
- Standard: IEC 61482-1-2 /1-1, DIN EN 388 / 407
- Direct incident energy (after box test: class 2) (Eio): 427 kJ / m<sup>2</sup>
- Good touch sensitivity due to soft leather glove palm (breathable materials maximise wearing comfort)

785796	medium	Arc-fault tested protective gloves	2 971.70
--------	--------	------------------------------------	----------



P01157151



P01157150



P01157151 + P01102134



P01120580

**Chauvin Arnoux - PEL103 Power & Energy Loggers IP54 casing**

Portable, advanced yet simple to use Power and Energy logger, designed for energy audits (ISO 50001 standard) or one-off measurements of the Power and Energy values in low-voltage electrical networks (1000 V CAT III)

PEL100 series Power and Energy loggers provide a complete solution to measuring and identifying energy consumption in any industry, they can be used handsfree, remotely without interruption to the mains power.

The logger tracks even the slightest consumption in an electrical network, providing all Power and Energy measurement recording on the internal 2GB SD card, while simultaneously permitting real-time monitoring on its backlit 4 line LCD display.

Recordings are time/date stamped for ease of comparing measured gains achieved before and after installation modification. Easily transfer recorded data to a PC via the free PEL data transfer software and SD card with USB adaptor (included).

Designed to fit inside most electrical cabinets thanks to its magnetic base or hook for easy mounting.

**Key Features of the PEL103 include:**

Measurements and display of:

- RMS frequency, voltage and current measurements
- Voltage measurement ranges 10 to 1000V AC/DC +/- 0.2 % + 0.5 V
- Current measurement ranges 5 mA to 10 kA AC / 50 mA to 1.4 kA DC ±0.5 %
- VA, W and var power values
- Power Factor (PF), cos φ, tan φ and crest factor
- Total Harmonic Distortion (THD) for currents and voltages
- DC, 50 Hz, 60 Hz and 400 Hz measurements
- Phase rotation indication and MIN/MAX indication of all parameters
- VAh, Wh (source, load) and varh (4 quadrant) energy values, total energy
- Harmonics: up to the 50th order for currents and voltages (an essential feature to help identify problems)

- **Network types include:** Three phase (with or without neutral), split phase, single phase
- **Automatic recognition:** Of the type of sensor connected
- **Communication / Data transfer:** USB, Ethernet and Bluetooth / PEL transfer PC software (included)
- **Records:** Measurements and calculation results on SD card (included)
- **Acquisition rate:** 128s/period



Scan to watch video

**PEL 103 Power and Energy logger (KIT) (created as a complete kit with following accessories)**

- 1 x PEL103 Power and Energy Logger: Analyser with backlit LCD screen
- 3 x MA193 (200 mm) flexible current clamps: MINIFLEX MA193 flexible current sensors - 200mA to 10 kA
- 4 x Measurement leads and crocodile clips: Robust high quality test leads for frequent use/built to last
- 1 x Set of coloured rings and Inserts: For easy identification of connections and leads
- 1 x 2GB SD card (internal): SD card to USB adaptor

SD card to USB adapter, USB cable, mains cable, MultiFIX mounting system, operating manual (on CD)  
PEL transfer PC software enabling data to be transferred to PC, all in a convenient canvas carrying bag.

type	model	description	dimensions (mm)			price (ea)
			(H)	(W)	(D)	

**PEL 103 Power and Energy logger (KIT)**

P01157151	PEL103 (KIT)	portable power and energy logger/analyser	256	125	37	61 883.44
P01157150	PEL102 (KIT)	as above, but without LCD display screen	256	125	37	38 514.71

**Accessories for PEL103 Power and Energy logger**

P01120434B	MN 93A	compact tong clamps for PEL102/3	Ø20 mm	0.005 - 100A		6 930.12
P01120323B	C193	compact tong clamps for PEL102/3	Ø52 mm	1 - 1000A		10 000.72
P01120580	MA193-250	Ampflex 250 mm flexible current sensor	Ø70 mm	200mA - 10kA		5 835.29
P01120526B*	A193-450	Ampflex 450 mm flexible current sensor	Ø140 mm	100mA - 10kA		5 896.24
P01101959	CA833X-F	for reading from 5A secondary CT's		5A adaptor		33 374.05
P01102134	self-power	mains adaptor for self powering PEL from supply		mains adaptor		4 349.55
P01295174*	mains lead	mains power cable - (2P EUR)				355.37
P01295476*	test leads	spare measurement leads (3m) with crocodile clips			KIT (black)	3 233.91
P01102080*	set	ID rings and inserts (for ends of leads and sensors)			diff. colours	924.63
P01298078*	bag no.23	canvas carrying bag for PEL analyser and access				1 875.71

\* Items supplied with standard PEL KIT.

**Data processing software power quality & installation supervision**

Automatically recognizes the instrument connected to the PC and opens the corresponding menu, providing direct access to the configuration and saved data. Includes many predefined report templates for quick generation in compliance with applicable standards.

Users can create personalised models to fit their requirements and add comments directly.

- Configuration of all the functions of instruments connected to a PC or via Bluetooth
- Recovery of the recorded measurement data and backup of measurement files
- Opening of saved files / processing and creation of reports (EN50160)
- Export into an Excel spreadsheet or PDF format / Database management

P01102095	DataView	powerful configuration/transfer/measurement data processing software				15 249.48
-----------	----------	--	--	--	--	-----------



**DIACAM 2 series - Thermal Camera**

**DIACAM 2** is a high performance thermal camera making it simple to perform thermal inspections for energy audits, ensuring trouble-free industrial, electrical or mechanical maintenance.

The wide 2.8-inch screen with auto brightness adjustment provides comfortable reading with a field of view of 38° x 28° and the camera is focus-free. A built-in sliding cover protects the highly sensitive lens. Contextual help guides users step-by-step, limiting the risk of errors. Particularly rugged, with IP54 ingress protection, the camera can withstand falls from 2 metres.

**Industrial maintenance** For electrical maintenance, can detect electrical equipment malfunctions, particularly abnormal overheating before a fault occurs, avoiding the considerable cost of halting production to carrying out repairs.

**Report creation** The supplied CAMReport® software, used to create automatic reports can be exported in Word or PDF format, simplifying printing and archiving.

**Features:**

- Flexible use thanks to its Laser pointer and focus-free capability with 38° x 28° field of view
- Exceptional 9-hour continuous use
- Recovery of data from other measuring instruments (*current, humidity, dew point, etc.*)
- Recording and storage in memory of the configurations for each application
- Allows you to record voice comments directly on the image
- Comfortable grip, perfect balance with direct access to all functions with just one hand
- Wide 2.8-inch screen with automatic or manual brightness control
- Slide-down protective lens cover
- Quick start-up

**Detector:**

Type: UFPA microbolometer, 8 ~14 µm  
 Frequency: 9 Hz  
 Sensitivity (N.E.T.D): 80 mK @ 30°C (0.08 °C @ 30 °C)

**Temperature Measurement:**

Temperature range: -20 °C to +250 °C  
 Accuracy: ±2 °C or ±2 % of reading

**Image Performance:**

Thermal image: -20 °C to +250 °C  
 Field of view: 38° x 28°  
 IFOV (*spatial resolution*): 4.1 mrad  
 Focus: Fixed  
 Minimum focal distance: 30 cm  
 Real image: Yes (320 x 240 pixels)  
 Display mode: Thermal image, real image with automatic parallax compensation (*merging of both images possible with PC software*)

**Analytical Functions:**

Measuring Tools: Manual cursor + automatic detection + Min Max Avg on adjustable area + temperature profile + isotherm  
 Parameter settings: Emissivity, environmental temperature, distance, relative humidity  
 Vocal comments: Yes via Bluetooth (*earphones provided*)  
 Data storage: On 2 GB micro SD card (*approx. 4.000 images*) replaceable up to 32 GB  
 Image format: PNG - thermal and real images recorded simultaneously  
 Laser pointer: Yes

**Image Display:**

Settings: Automatic or manual adjustment of the min max for the palette  
 Freezing of image: Animated or fixed image  
 Display of image: Multi-palette  
 Screen: 2.8 inch

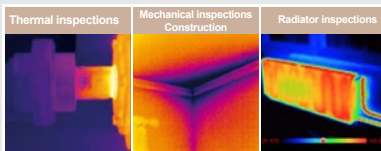
**Power Supply:**

Type: NiMH rechargeable batteries with low self-discharge  
 Recharging method: External charger (*supplied*)  
 Battery life: 9 hrs (*typical*) / 50 % brightness and Bluetooth deactivated  
 Dimensions / weight: 225 x 125 x 83 / 700 g

**Delivered with:** C.A 1954 thermal camera in a site-proof case with 4 NiMH batteries and battery charger, micro SD HC card, USB cable, Bluetooth earpiece, specimen measurement report, CAM Report® software on CD-Rom and user's manual.



P01651904



Thermal Camera - DIACAM 2		IP54	
type	model	description	price
P01651904	C.A 1954	high performance thermal camera	48 646.53



**Electrical installation tester**

Designed for checking safety on electrical installations, the **C.A 6133** tester can be used to test new before powering up, installations check existing installations whether in operation or not, and troubleshoot malfunctions. For certification organizations, these portable instruments are simple, effective and, above all, compliant with applicable standards.

The C.A 6133 is designed to be exceptionally simple to use. All measurements and functions are accessible directly on the front panel of these compact, lightweight instruments. Explicit markings on terminals prevent any risk of connection errors.

- Earth measurement by stake and loop methods
- Continuity measurement at 0.2A
- Insulation testing
- RCD testing: Current and trip time
- Automatic test sequences
- Storage of test results
- ANDROID application for report generation
- Power supply by mains-rechargeable batteries, USB socket or vehicle cigarette lighter

The C.A 6133 is equipped with a cable compensation function to ensure reliable measurements and can be used for Voltage, Continuity, Resistance, Insulation and Loop measurements. Current can be measured with (optional) MN73A external clamp. The tester also checks the phase rotation and can test type A & AC RCDs in ramp or pulse mode. To save time the C.A6133 can automatically run test sequences and store the results. For example, it is possible to store a sequence such as AUTO LOOP - RCD - MΩ to speed up work in the field.

**Ergonomics:**

- Stand for positioning on a bench or table
- Magnetized casing for magnetic mounting
- 4-point strap for effortless hands-free use
- Backlit screen for easy reading, even in low light conditions
- Terminals with explicit markings (L, N, PE, H, S, E, +, com connections) prevent connection errors
- Remote-control probe for starting tests remotely
- A three-pole cable for direct measurements on 2P + E sockets

The "IT Report" dedicated to electrical installation testing enables users to download test results via Bluetooth and to generate and view the measurement report.

Voltage measurement:	550 VAC / 800 VDC
Continuity:	At 200mA,
Resistance:	From 1 to 99.99 kΩ
Insulation: test voltage	250V, 500V or 1.000 V (0.01 - 999.9 MΩ / 10 kΩ or 100 kΩ / ± (3% R + 3 cts)
Type AC & A RCDs:	30mA, 100mA, 300 mA, 500 mA, 650 mA
RCD in pulse mode:	Tripping time
RCD in ramp mode (30 mA):	Tripping current
Phase rotation:	45 to 550V; 45 to 65 Hz
Frequency measurement:	30 Hz to 999.9 Hz
Insulation:	Additional 1.000 V test voltage
3P earth (stakes):	Up to 2.000 Ω
Automatic RCD test sequence:	No trip - pulse - ramp
Automatic test sequence:	Loop - RCD - MΩ
Data storage:	30 sites with 99 tests each
Power supply:	By rechargeable batteries with built-in charger
Bluetooth communication:	Yes

Recharging possible via the mains, USB socket or vehicle cigarette lighter socket

Automatic recognition of the optional MN73A external clamp

**Delivered with:** Carrying bag containing: 1 neck strap, 1 three-pole EURO mains cable, 3 safety cables with crocodile clips, 1 test probe, USB 2A power supply + USB cable, 6 Ni MH rechargeable batteries, test report with measurement report



P01146013

type	model	description	price
P01146013	C.A 6133	electrical installation tester for all applications	19 516.12
<b>Accessories for above C.A 6133 Installation tester</b>			
P01120439	MN73A	current clamp for above electrical installation tester	9 539.55
P01102157		remote-control probe for electrical installation tester	1 441.00



