

# Rittal – The System.

Faster – better – everywhere.

## ► Rittal Automation Systems – Automate your panel building and switchgear manufacturing



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

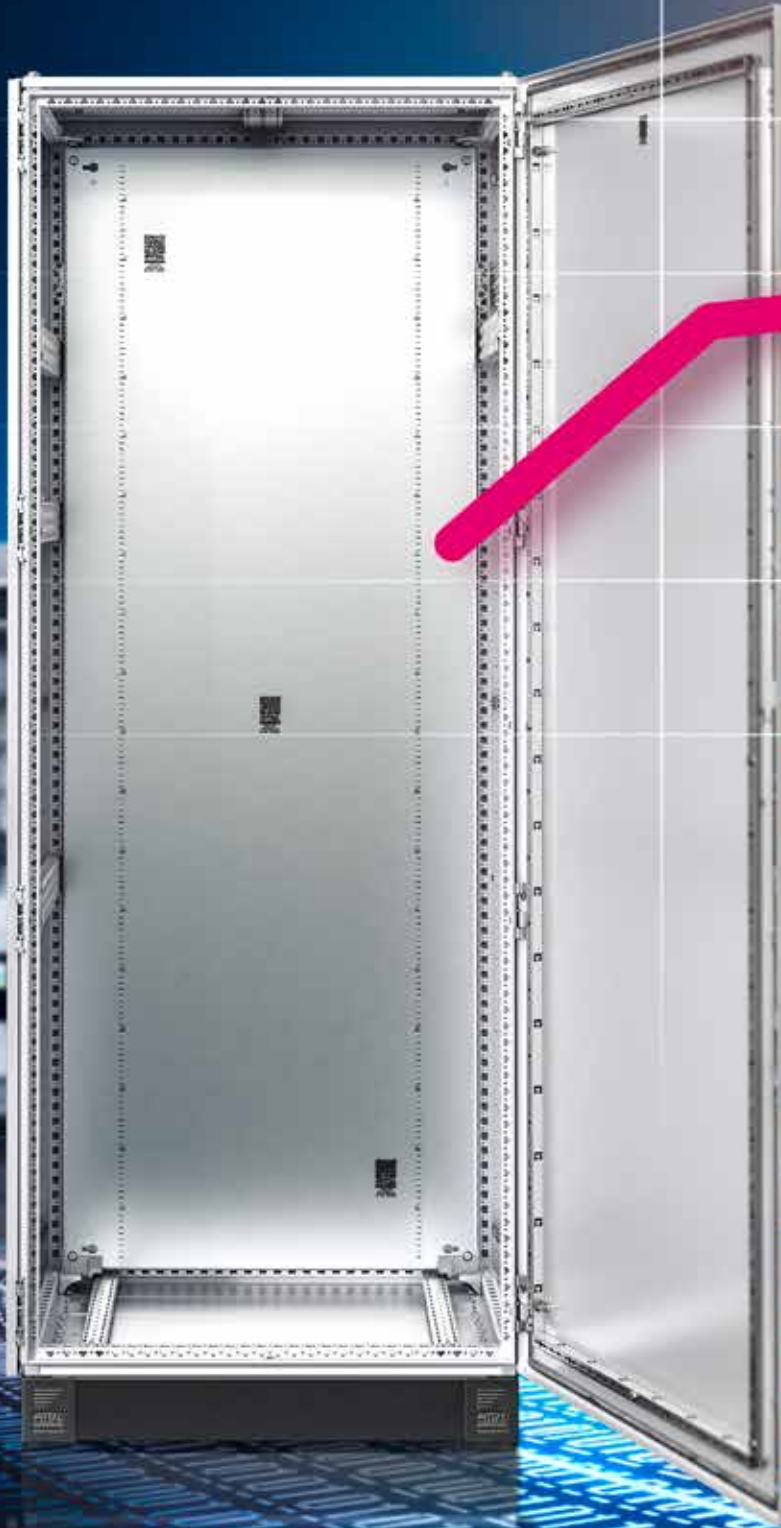
IT INFRASTRUCTURE

SOFTWARE & SERVICES



# Rittal – The System.

Faster – better – everywhere.



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

# Increasing efficiency through automation

**Rittal can supply all your machines and devices** – The Rittal Automation Systems division can supply everything you need to make enclosure assembly easier, faster, more accurate and more repeatable through automation. This allows you to link all work operations together into one highly efficient, digitally seamless, automated process. All machines and devices required for this purpose, including manual handling aids and a wide selection of hand tools, are available from a single source and can be ordered directly from Rittal.

## Rittal Automation Systems

### Wire Processing

Cutting machine C8+.....	11
Stripping machine S22 .....	12
Stripping and crimping machine L8 .....	13
Stripping and crimping machine R8 .....	14
Crimping machine R8 E .....	15
Stripping and crimping machine RC .....	16
Wire Terminal WT fully automated wire processing machine .....	26

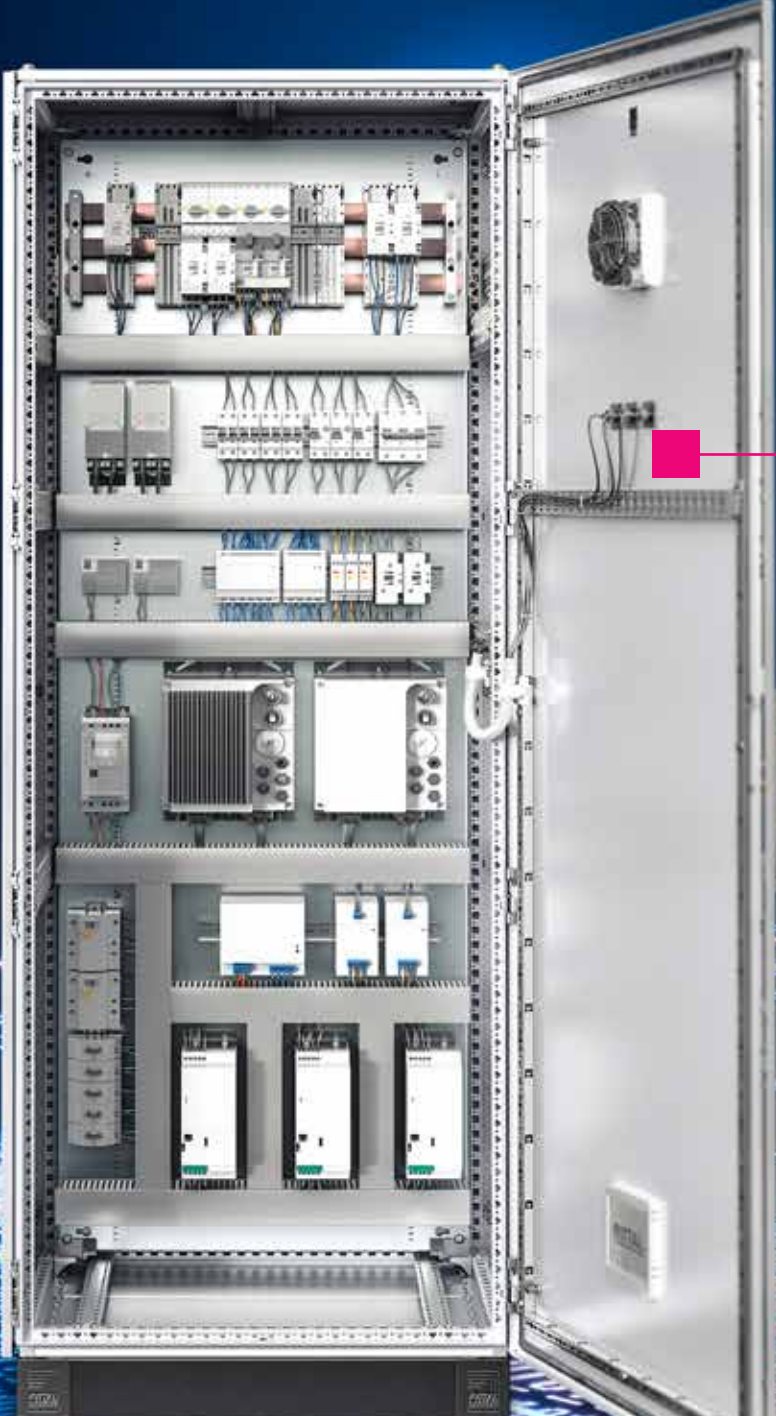
IT INFRASTRUCTURE

SOFTWARE & SERVICES



# Improve the workflow in every production phase

With Rittal Automation Systems – Engineering-generated digital data (e.g. from Eplan tools) allows the seamless automation of production processes. This is based on the virtual prototype. It carries all the relevant information, and in collaboration with the product spectrum from Rittal Automation Systems, ensures maximum possible efficiency at every point of the panel-building workflow.



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL



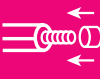
### **Automate machining**

Fully automated milling or laser machining, plus machining of cable ducts and busbars



### **Make component mounting more flexible**

Automatic manufacturing and component mounting of terminal strips



### **Organize wire processing**

Professional, rational solutions for wire machining and processing



### **Streamline wiring**

To complete the process chain, Rittal Automation Systems are involved in developing pioneering wiring solutions, right through to full automation



### **Simplify handling**

Ergonomic, efficient handling systems for transport and lifting operations



### **Perfecting the hand tool**

High-quality hand tools for professional use in industry and trade

IT INFRASTRUCTURE

SOFTWARE & SERVICES



# Increase productivity at every step

**With seamless optimization of all process stages** – In panel building and switchgear manufacturing, efficiency relies on the quality of productivity, and on all automated and manual work stages. We achieve the ideal workflow with the aid of digitalization, from engineering right through to production.

## Machining

- Significant time saving with the milling center Perforex BC
- High level of precision with the laser center Perforex LC
- Less wastage with the cutting center Secarex AC 18
- Efficient working with the copper busbar workstations CW 120-S and CS 120-M

## Assembly

- Rapid throughput with the terminal block assembly center
- Athex TC 80 CS

## Wire processing and wiring

- Project-controlled cutting with the length-cutting machines C8+
- Quick insulation stripping with the stripping machines S22
- User-friendly wire processing with the crimping machines L8, R8, R8 E, RC
- Faster processes, utilizing fully automated wire processing with the Wire Terminal WT

## Handling

- Fatigue-free, ergonomic working with Rittal assembly frames
- Safe transportation of enclosure panels with the storage and transport trolley LT 1000
- Flexible work surface with the functional trolley for assembly and maintenance

## Hand tools

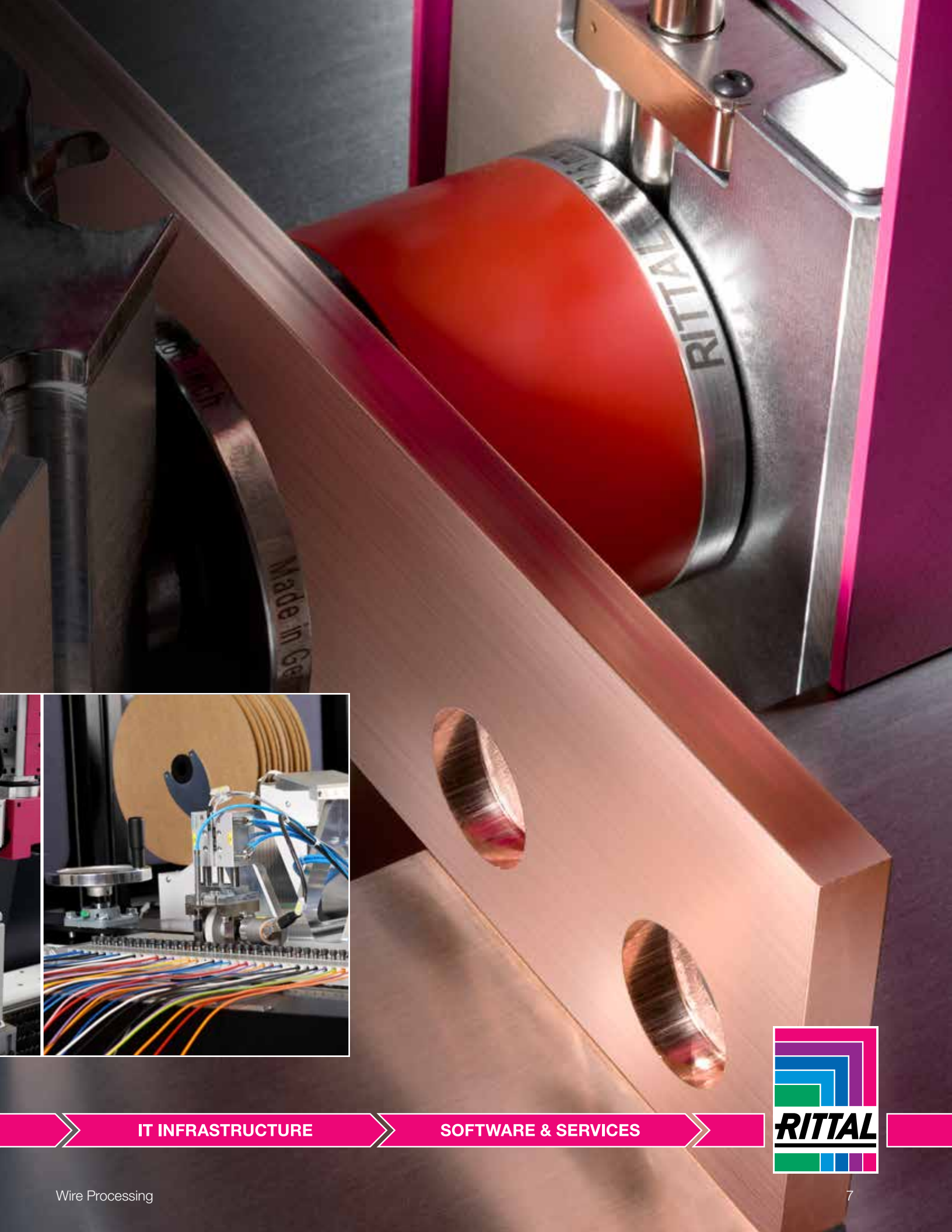
- Covers all manual processes in the workshop with high-quality hand tools



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

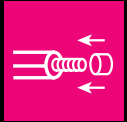


IT INFRASTRUCTURE

SOFTWARE & SERVICES

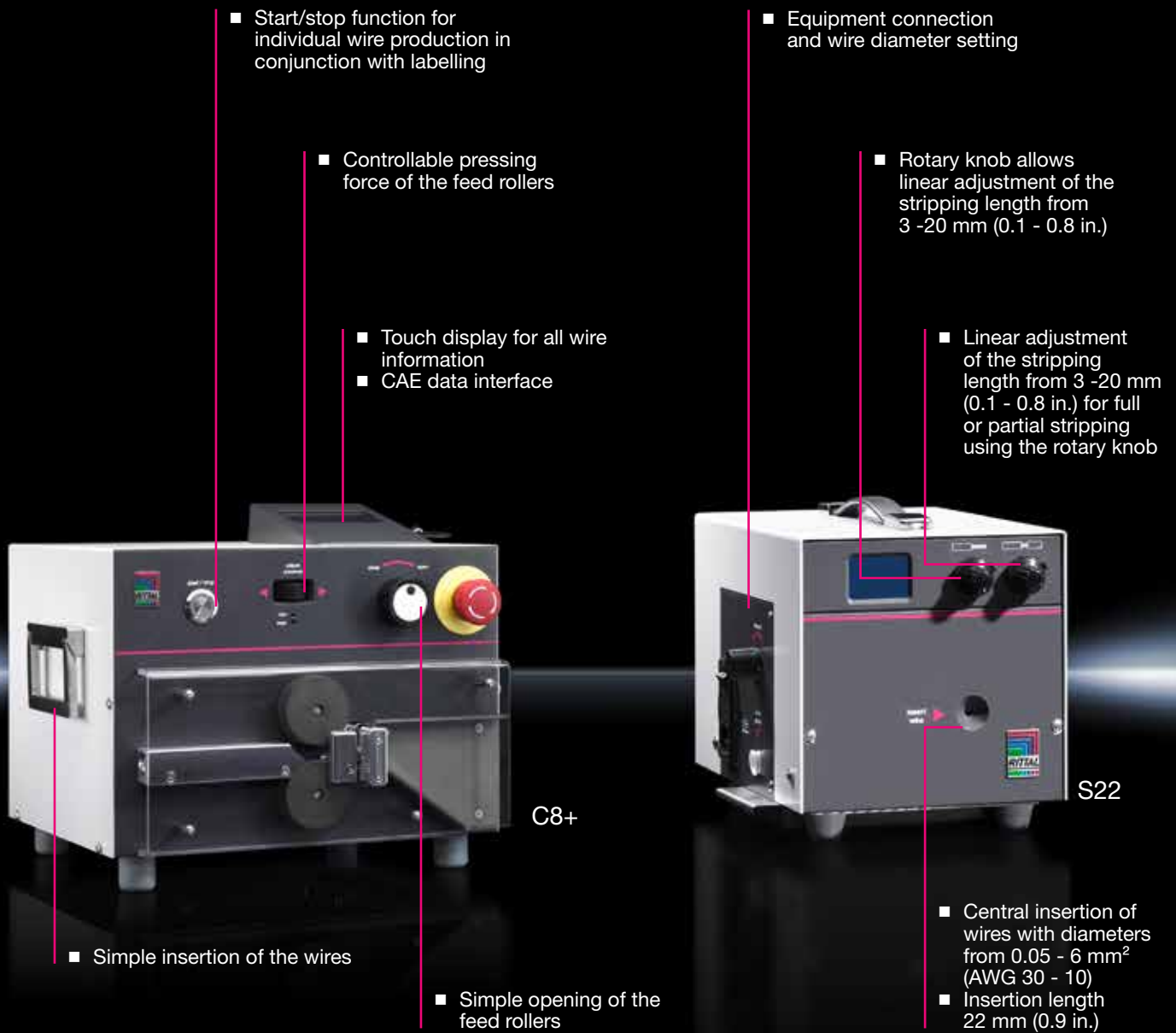


# Wire cutting machine C8+ and stripping machine S22



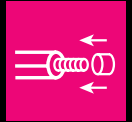
The wire cutting machine C8+ makes work processes more efficient by cutting wires up to 8 mm<sup>2</sup> (AWG 28) or 10 mm<sup>2</sup> (AWG 8) diameter to individually set lengths. Cutting orders can also be managed, documented and transmitted to the wire cutting machine C8+ from a PC or CAE data interface (EPLAN Pro Panel) via USB. In this way, the C8+ wire cutting machine additionally supports the cable labeling and wiring process by displaying the source/target code.

The stripping machine S22 is electrically powered for accurate, careful stripping of the insulation from your wires.

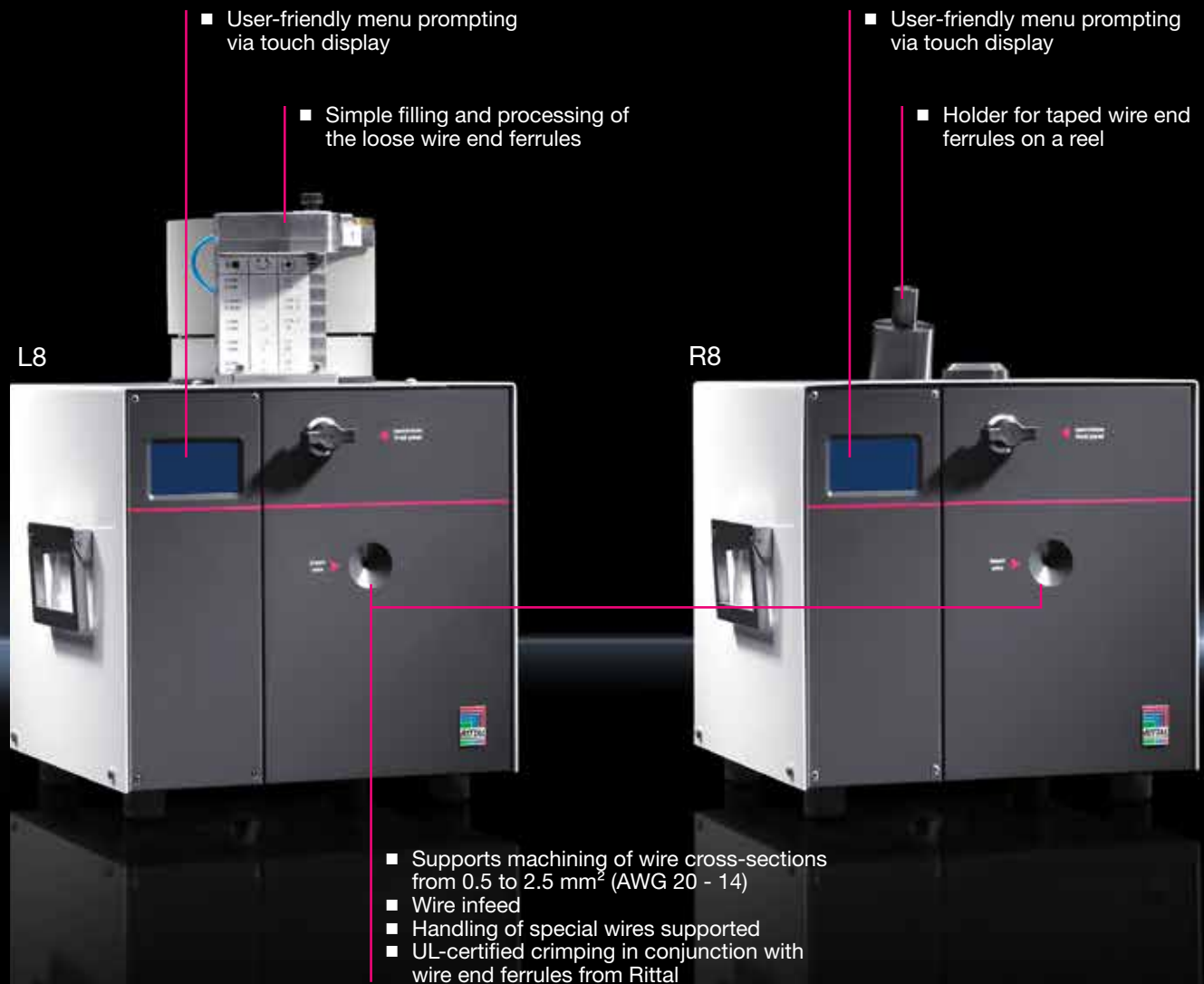




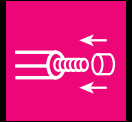
# Stripping and crimping machines L8 and R8



Electro-pneumatically driven wire-stripping and crimping machines for safe, fast processing of insulated wire end ferrules. The value-added feature of these electro-pneumatic crimping machines is the fully automated detection of the wire diameter and processing of the wire end ferrules. No tool changes are required. Linear adjustment of the blades and the high forces generated by the pneumatic crimping unit support the processing of all standard cables as well as special ferrules (AWG) in the application range from 0.5 to 2.5 mm<sup>2</sup> (AWG 20 – 14) with a crimping length of 8 mm (0.3 in). The integrated daily unit counter provides a continuous overview of your project quantities.



# Stripping and crimping machines RC and R8 E



The electro-pneumatically driven wire-stripping and crimping machine RC is suitable for processing wire end ferrules in 8 mm (0.3 in) and 10 mm (0.4 in) lengths. The 5-way holder eliminates the need to switch between wire end ferrules for different cross-sections. The R8 E crimping machine processes insulated wire end ferrules and standard PVC cables in cross-sections ranging from 0.5 to 2.5 mm<sup>2</sup> (AWG 20 – 14) with a crimping length of 8 mm (0.3 in). For flexible use in the workshop, all you need is a power connection. Both machines guarantee UL-certified crimping in conjunction with wire end ferrules from Rittal.



**Note:**  
The wire end ferrules shown here are not included with the supply.

# Wire cutting machine C8+



Semi-automated machine for cutting wires to an individually adjustable length.

**Design:**

- Touchscreen display
- E-stop

**Benefits:**

- User-friendly operation
- Simple insertion of the wires
- Simple opening of the feed rollers
- PC compatible
- Length-cutting with interface to CAE data supported
- Supports the process of labelling cables by showing the connection point on the display
- Simply transmit projects and orders to length-cutting machine C8+

**Technical specifications:**

- Fine-wire strand 0.08 - 10 mm<sup>2</sup> (AWG 28 - 14)
- Single-wire strand 0.08 - 2.5 mm<sup>2</sup> (AWG 28 - 8)
- For wire lengths 1 - 99999 mm
- Feed rate 0 - 1.5 m/s
- Controllable pressing force of the feed rollers
- DC servo-drive
- Insertion length 27 mm (1.06 in.)

**Supply includes:**

- Length-cutting machine C8+
- Connection cable with connector
- Software connection, CAE data
- Installation CD

Model No.	Packs of	4050.455	Page
Machine dimensions H x W x D mm (H x W x D in)		470 x 380 x 360 (18.5 x 14.9 x 14.2)	
Cycle times		< 2	
Electrical connection V, ~, Hz		100 - 240, 1~, 50	
Apparent power VA		240	
Interfaces		EPLAN Pro Panel; CAE data	
Weight kg (lbs)		22.0 (48.5)	
<b>Accessories</b>			
Wire dispenser	1pc(s)	4050.463	17

# Stripping machine S22



Semi-automated machine for stripping wires of varying diameters.

**Design:**

- Touchscreen display
- Integral counter (total quantity)
- Integral counter (daily quantity)
- Linear adjustment of the wire stripping length

**Benefits:**

- Diameter is easily set using the rotary knob
- Simple insertion of the wires
- User-friendly operation

**Technical specifications:**

- Electrically powered
- Wire stripping range 0.05 - 6 mm<sup>2</sup> (AWG 30 - 10)
- Insulation stripping length 3 - 20 mm (0.12 - 0.79 in.)
- Draw-off length 3 - 20 mm (0.12 - 0.79 in.)
- Insertion length 22 mm (0.87 in.)

**Supply includes:**

- Stripping machine S22
- Special funnel for inserting thin conductors
- Spare blade

Model No.	Packs of	4050.451	Page
Machine dimensions H x W x D mm (H x W x D in)		190 x 190 x 295 (7.5 x 7.5 x 11.6)	
Cycle times		0.5	
Electrical connection V, ~, Hz		100 - 240, 1~, 50/60	
Apparent power VA		70	
Weight kg (lbs)		7.5 (16.5)	

# Crimping machine L8



Electro-pneumatically driven wire stripping and crimping machine for loose, insulated wire end ferrules.

**Design:**

- Touchscreen display

**Benefits:**

- Easy to operate
- Secure, fast processing of insulated wire end ferrules
- No set-up time, due to automatic tool change
- Handling of special wires supported
- Simple, quick component mounting
- Automatic detection of wire diameters

**Technical specifications:**

- Crimping range 0.5 - 2.5 mm<sup>2</sup> (AWG 20 - 14)
- Crimping length 8 mm (0.31 in.)
- Insertion length 35 mm (1.38 in.)
- Processing of wire end ferrules with plastic collars in special sizes supported

**Supply includes:**

- Crimping machine L8
- 1 oscillating conveyor 0.5 - 1.5 mm<sup>2</sup>
- 1 oscillating conveyor 1.5 - 2.5 mm<sup>2</sup>

**Note:**

- The standard crimping form is trapezoid – others available on request

Model No.	Packs of	4050.452	Page
Machine dimensions H x W x D mm (H x W x D in)		460 x 390 x 330 (18.1 x 15.4 x 12.9)	
Cycle times		1.5	
Compression		Trapezoid crimp	
Electrical connection V, ~, Hz		100 - 240, 1~, 50/60	
Apparent power VA		110	
Compressed air connection bar		5.5	
Weight kg (lbs)		31.0 (68.3)	
<b>Accessories</b>			
Oscillating conveyor			17
Wire ferrules			18-23

# Crimping machine R8



Electro-pneumatically driven wire stripping and crimping machine for taped wire end ferrules on a reel.

**Design:**

- Touchscreen display

**Benefits:**

- Easy to operate
- Secure, fast processing of insulated wire end ferrules
- No set-up time, due to automatic tool change
- Convenient adjustment of the wire stripper
- Simple, quick component mounting
- Automatic detection of wire diameters
- Handling of special wires supported

**Technical specifications:**

- Crimping range 0.5 - 2.5 mm<sup>2</sup> (AWG 20 - 14)
- Crimping length 8 mm (0.31 in.)
- Insertion length 35 mm (1.38 in.)
- Processing of wire end ferrules with plastic collars in special sizes supported

**Note:**

- The standard crimping form is trapezoid – others available on request

Model No.	Packs of	4050.453	Page
Machine dimensions H x W x D mm (H x W x D in)		430 x 390 x 330 (16.9 x 15.4 x 12.9)	
Cycle times		1.5	
Compression		Trapezoid crimp	
Electrical connection V, ~, Hz		100 - 240, 1~, 50/60	
Apparent power VA		25	
Compressed air connection bar		5.5	
Weight kg (lbs)		23.0 (50.7)	
<b>Accessories</b>			
Wire ferrules			18-23

# Crimping machine R8 E



Electrically powered wire stripping and crimping machine for taped wire end ferrules on a reel.

**Design:**

- Touchscreen display

**Benefits:**

- Easy to operate
- Fast adjustment
- Flexible use in the workshop
- Rapid replacement of consumables

**Technical specifications:**

- Crimping range 0.5 - 2.5 mm<sup>2</sup> (AWG 20 - 14)
- Crimping length 8 mm (0.31 in.)
- Insertion length 40 mm (1.57 in.)

**Note:**

- The standard crimping form is trapezoid – others available on request

Model No.	Packs of	4050.454	Page
Machine dimensions H x W x D mm (H x W x D in)		230 x 288 x 345 (9.1 x 11.3 x 13.6)	
Cycle times		1.8	
Compression		Trapezoid crimp	
Electrical connection V, ~, Hz		100 - 240, 1~, 50/60	
Apparent power VA		100	
Weight kg (lbs)		16.0 (35.3)	
<b>Accessories</b>			
Wire ferrules			18-23

# Crimping machine RC



Electro-pneumatic crimping machine with 5-way magazine for processing insulated wire end ferrules on a reel.

**Design:**

- Select the wire diameter using the touchscreen
- Reel holder may be fitted with a maximum of 23,000 wire end ferrules

**Benefits:**

- Easy to operate
- Secure, fast processing of insulated wire end ferrules
- No set-up time, due to automatic tool change
- Simple, quick component mounting
- No changing of the wire end ferrules required due to 5-way magazine

**Technical specifications:**

- Crimping range 0.5 - 2.5 mm<sup>2</sup> (AWG 20 - 14)
- Crimping length 8 and 10 mm
- Insertion length 27 mm (1.06 in.)

**Note:**

- The standard crimping form is trapezoid – others available on request

Model No.	Packs of	4050.456	Page
Machine dimensions H x W x D mm (H x W x D in)		565 x 335 x 485 (22.2 x 13.2 x 19.1)	
Cycle times		< 2	
Compression		Trapezoid crimp	
Electrical connection V, ~, Hz		100 - 240, 1~, 50/60	
Apparent power VA		16	
Compressed air connection bar		5.5	
Weight kg (lbs)		22.0 (48.5)	
<b>Accessories</b>			
Wire ferrules			18-23



# Accessories

## for wire processing machines

### Oscillating conveyor

#### For crimping machine L8

Feed guide for loose wire end ferrules.

#### Benefits:

- Accurate, precise feeding of wire end ferrules

To fit Model No.	Application	Packs of	Model No.
4050.452	for loose wire end ferrules with diameter 0.5 – 1.5 mm <sup>2</sup>	1 pc(s).	<b>4053.420</b>
4050.452	for loose wire end ferrules with diameter 1.5 – 2.5 mm <sup>2</sup>	1 pc(s).	<b>4050.468</b>



### Wire dispenser

#### For wire cutting machine

Dispensing device for the infeed of conductors. Suitable for conductors on cable coils or from boxes.

#### Benefits:

- Convenient removal and dispensing of cables and wires

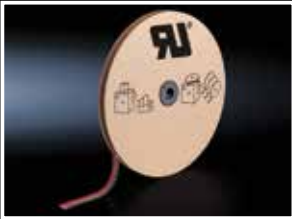
#### Technical specifications:

- Cable coil diameter ≤ 300 mm (≤ 11.8 in.)
- Cable coil width ≤ 200 mm (≤ 7.9 in.)
- Clamping cone 15 - 23 mm (0.59 - 0.91 in.)
- Box dimensions 240 x 250 x 150 mm (9.45 x 9.84 x 5.9 in.)

Packs of	Model No.
1 pc(s).	<b>4050.463</b>



# Wire end ferrules



## Wire end ferrule

With plastic collar.

### Technical specifications

– Heat resistant to 105°C (221° F)

### Material:

– E-Cu, galvanic tin-plated  
– Plastic collar: Polypropylene

### Note:

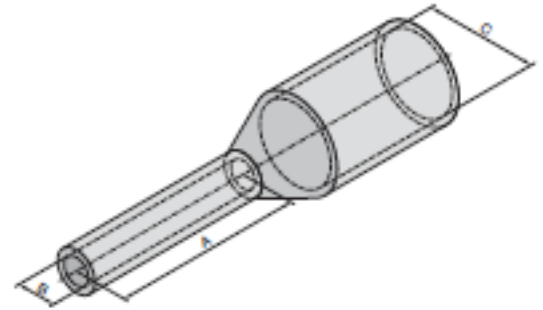
– UL-certified in conjunction with the relevant tools, such as crimping machines.

### Standards:

– AEH DIN 46228

### Approvals

– Available on the Internet



A: Length  
B: Cross-section  
C: Internal diameter

### For cross-section 0.14 - 0.34 mm<sup>2</sup>

Model No.	4050.752	4050.754	4050.757
Packs of	500 pc(s).	500 pc(s).	500 pc(s).
Delivery form	Loose	Loose	Loose
For	Manual wire processing	Manual wire processing	Manual wire processing
For cross-section mm <sup>2</sup>	0.14	0.25	0.34
AWG	26	24	22
Length mm	8	8	8
Internal diameter mm	1.5	1.8	2
Color	Grey	Light blue	Turquoise
DIN color code	–	–	–
Rittal color code	■	■	■
Multiple color codes supported	–	–	–

# Wire end ferrules

## For cross-section 0.5 mm<sup>2</sup>

Model No.	4050.730	4050.737	4050.746	4050.760	4050.761	4051.597	4051.598
Packs of	500 pc(s).	1000 pc(s).	500 pc(s).	500 pc(s).	500 pc(s).	5000 pc(s).	5000 pc(s).
Delivery form	Loose	Loose (10 packs of 100)	Taped	Loose	Loose	Taped	Taped
For	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine RC
For cross-section mm <sup>2</sup>	0.5	0.5	0.5	0.5	0.5	0.5	0.5
AWG	20	20	20	20	20	20	20
Length mm	8	12	8	8	10	8	10
Internal diameter mm	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Color	White	White	White	Orange	Orange	Orange	Orange
DIN color code	■	■	■	–	–	–	–
Rittal color code	–	–	–	■	■	■	■
Multiple color codes supported	–	–	–	–	–	–	–

## For cross-section 0.5 mm<sup>2</sup>

Model No.	4051.638	4051.695	4050.742	4051.536	4051.540	4051.544	4051.548
Packs of	1000 pc(s).	5000 pc(s).	500 pc(s).	4000 pc(s).	4000 pc(s).	4000 pc(s).	4000 pc(s).
Delivery form	Loose (10 packs of 100)	Taped	Loose	Taped	Taped	Taped	Taped
For	Manual wire processing	Crimping machine RC	Crimping machine L8 Manual wire processing	Crimping machine RC	Crimping machine RC Crimping machine R8	Crimping machine RC	Crimping machine RC Crimping machine R8
For cross-section mm <sup>2</sup>	0.5	0.5	0.5	0.5	0.5	0.5	0.5
AWG	20	20	20	20	20	20	20
Length mm	10	10	8	10	8	10	8
Internal diameter mm	2.6	2.6	2.9	2.9	2.9	2.9	2.9
Color	White	White	White	Orange	Orange	White	White
DIN color code	■	■	■	–	–	■	■
Rittal color code	–	–	–	■	■	–	–
Multiple color codes supported	–	–	–	■	■	■	■

# Wire end ferrules

## For cross-section 0.75 mm<sup>2</sup>

Model No.	4050.731	4050.738	4050.747	4050.764	4050.766	4051.599	4051.600
Packs of	500 pc(s).	1000 pc(s).	5000 pc(s).	500 pc(s).	500 pc(s).	5000 pc(s).	5000 pc(s).
Delivery form	Loose	Loose (10 packs of 100)	Taped	Loose	Loose	Taped	Taped
For	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine RC
For cross-section mm <sup>2</sup>	0.75	0.75	0.75	0.75	0.75	0.75	0.75
AWG	18	18	18	18	18	18	18
Length mm	8	12	8	8	10	8	10
Internal diameter mm	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Color	Grey	Grey	Grey	White	White	White	White
DIN color code	■	■	■	–	–	–	–
Rittal color code	–	–	–	■	■	■	■
Multiple color codes supported	–	–	–	–	–	–	–

## For cross-section 0.75 mm<sup>2</sup>

Model No.	4051.641	4051.696	4050.743	4051.537	4051.541	4051.545	4051.549
Packs of	1000 pc(s).	5000 pc(s).	500 pc(s).	4000 pc(s).	4000 pc(s).	4000 pc(s).	4000 pc(s).
Delivery form	Loose (10 packs of 100)	Taped	Loose	Taped	Taped	Taped	Taped
For	Manual wire processing	Crimping machine RC	Crimping machine L8 Manual wire processing	Crimping machine RC	Crimping machine RC Crimping machine R8	Crimping machine RC	Crimping machine RC Crimping machine R8
For cross-section mm <sup>2</sup>	0.75	0.75	0.75	0.75	0.75	0.75	0.75
AWG	18	18	18	18	18	18	18
Length mm	10	10	8	10	8	10	8
Internal diameter mm	2.8	2.8	3.4	3.4	3.4	3.4	3.4
Color	Grey	Grey	Grey	White	White	Grey	Grey
DIN color code	■	■	■	–	–	■	■
Rittal color code	–	–	–	■	■	–	–
Multiple color codes supported	–	–	–	■	■	■	■

# Wire end ferrules

## For cross-section 1 mm<sup>2</sup>

Model No.	4050.732	4050.739	4050.748	4050.769	4050.770	4051.601	4051.602
Packs of	500 pc(s).	1000 pc(s).	5000 pc(s).	500 pc(s).	500 pc(s).	5000 pc(s).	5000 pc(s).
Delivery form	Loose	Loose (10 packs of 100)	Taped	Loose	Loose	Taped	Taped
For	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine RC
For cross-section mm <sup>2</sup>	1	1	1	1	1	1	1
AWG	18	18	18	18	18	18	18
Length mm	8	12	8	8	10	8	10
Internal diameter mm	3	3	3	3	3	3	3
Color	Red	Red	Red	Yellow	Yellow	Yellow	Yellow
DIN color code	■	■	■	–	–	–	–
Rittal color code	–	–	–	■	■	■	■
Multiple color codes supported	–	–	–	–	–	–	–

## For cross-section 1 mm<sup>2</sup>

Model No.	4051.644	4051.697	4050.744	4051.538	4051.542	4051.546	4051.550
Packs of	1000 pc(s).	5000 pc(s).	500 pc(s).	4000 pc(s).	4000 pc(s).	4000 pc(s).	4000 pc(s).
Delivery form	Loose (10 packs of 100)	Taped	Loose	Taped	Taped	Taped	Taped
For	Manual wire processing	Crimping machine RC	Crimping machine L8 Manual wire processing	Crimping machine RC	Crimping machine RC Crimping machine R8	Crimping machine RC	Crimping machine RC Crimping machine R8
For cross-section mm <sup>2</sup>	1	1	1	1	1	1	1
AWG	18	18	18	18	18	18	18
Length mm	10	10	8	10	8	10	8
Internal diameter mm	3	3	3.5	3.5	3.5	3.5	3.5
Color	Red	Red	Red	Yellow	Yellow	Red	Red
DIN color code	■	■	■	–	–	■	■
Rittal color code	–	–	–	■	■	–	–
Multiple color codes supported	–	–	–	■	■	■	■

# Wire end ferrules

## For cross-section 1.5 mm<sup>2</sup>

Model No.	4050.733	4050.740	4050.749	4050.773	4050.774	4051.603	4051.604
Packs of	500 pc(s).	1000 pc(s).	5000 pc(s).	500 pc(s).	500 pc(s).	5000 pc(s).	5000 pc(s).
Delivery form	Loose	Loose (10 packs of 100)	Taped	Loose	Loose	Taped	Taped
For	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Crimping machine RC
For cross-section mm <sup>2</sup>	1.5	1.5	1.5	1.5	1.5	1.5	1.5
AWG	16	16	16	16	16	16	16
Length mm	8	12	8	8	10	8	10
Internal diameter mm	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Color	Black	Black	Black	Red	Red	Red	Red
DIN color code	■	■	■	–	–	–	–
Rittal color code	–	–	–	■	■	■	■
Multiple color codes supported	–	–	–	–	–	–	–

## For cross-section 1.5 mm<sup>2</sup>

Model No.	4051.647	4051.698	4050.745	4051.539	4051.543	4051.547	4051.551
Packs of	500 pc(s).	1000 pc(s).	5000 pc(s).	500 pc(s).	500 pc(s).	5000 pc(s).	5000 pc(s).
Delivery form	Loose (10 packs of 100)	Taped	Loose	Taped	Taped	Taped	Taped
For	Manual wire processing	Crimping machine RC	Crimping machine L8 Manual wire processing	Crimping machine RC	Crimping machine RC Crimping machine R8	Crimping machine RC	Crimping machine RC Crimping machine R8
For cross-section mm <sup>2</sup>	1.5	1.5	1.5	1.5	1.5	1.5	1.5
AWG	16	16	16	16	16	16	16
Length mm	10	10	8	10	8	10	8
Internal diameter mm	3.5	3.5	4	4	4	4	4
Color	Black	Black	Black	Red	Red	Black	Black
DIN color code	■	■	■	–	–	■	■
Rittal color code	–	–	–	■	■	–	–
Multiple color codes supported	–	–	–	■	■	■	■

# Wire end ferrules

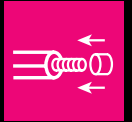
## For cross-section 2.5 mm<sup>2</sup>

Model No.	4050.734	4050.741	4050.750	4050.779	4051.525
Packs of	500 pc(s).	1000 pc(s).	3000 pc(s).	500 pc(s).	1000 pc(s).
Delivery form	Loose	Loose (10 packs of 100)	Taped	Loose	Loose (10 packs of 100)
For	Crimping machine L8 Manual wire processing	Manual wire processing	Crimping machine RC Crimping machine R8 Crimping machine R8 E	Manual wire processing	Manual wire processing
For cross-section mm <sup>2</sup>	2.5	2.5	2.5	2.5	2.5
AWG	14	14	14	14	14
Length mm	8	12	8	10	10
Internal diameter mm	4.2	4.2	4.2	4.2	4.2
Color	Blue	Blue	Blue	Blue	Blue
DIN color code	■	■	■	–	■
Rittal color code	■	–	■	■	–
Multiple color codes supported	–	–	–	–	–

## For cross-section 2.5 - 6 mm<sup>2</sup>

Model No.	4051.605	4050.735	4050.782	4050.783	4050.736	4050.785
Packs of	3000 pc(s).	500 pc(s).	500 pc(s).	500 pc(s).	100 pc(s).	100 pc(s).
Delivery form	Taped	Loose	Loose	Loose	Loose	Loose
For	Crimping machine RC	Manual wire processing	Manual wire processing	Manual wire processing	Manual wire processing	Manual wire processing
For cross-section mm <sup>2</sup>	2.5	4	4	4	6	6
AWG	14	12	12	12	10	10
Length mm	10	10	8	12	12	12
Internal diameter mm	4.2	4.8.2	4.8	4.8	6.3	6.3
Color	Blue	Grey	Grey	Grey	Yellow	Black
DIN color code	■	–	–	■	■	–
Rittal color code	■	■	■	–	–	■
Multiple color codes supported	–	–	–	–	–	–

# Wire Terminal WT fully automated wire processing machine



The compact Wire Terminal 24 or 36 fully automated wire processing machine ensures efficient, cost-effective wire processing. Up to 36 different wires in diameters ranging from 0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup> (AWG 20 - 14) may be processed fully automatically without retooling. The optional print system prints the wires in black or white type, then transfers them to downstream process stages using a controlled ordering system capable of accommodating up to 1300 processed wires. All production data can be read and processed via suitable interfaces. Manual logging of wire lists is also supported.



- Integral touch display for data processing

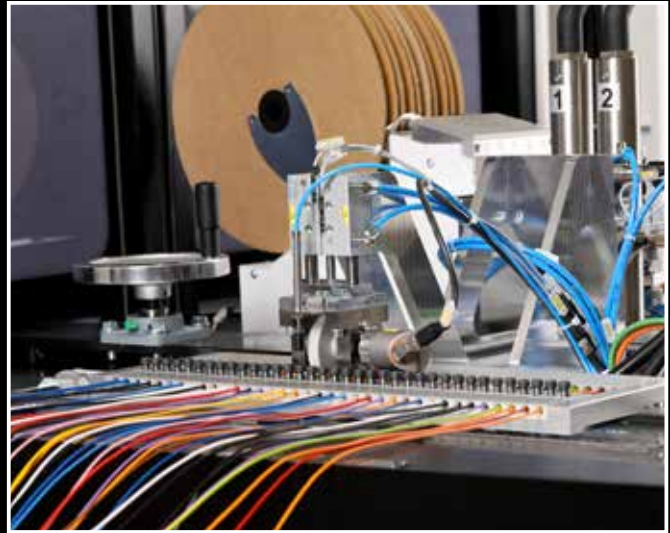
- Label printer for wire magazine identification





#### Wire storage

The modular, space-saving wire store and wire routing system for the Wire Terminal. Six wire drums are stored on each of the two levels in a space-saving design. Depending on the number of wires used, the fully automatic wire processing machine may be fitted with additional wire stores (central, left, right), each with space for 12 wire containers (see table on page 55 for selection).



#### 24 or 36 wires

The Wire Terminal may be fitted with wire guides for 24 or 36 wires. Wires are fed in using a 24-/36-wire feed magazine which is horizontally adjustable and controlled via a servo-motor NC axis. Wires are clamped by a spring-assisted clamp which is pneumatically released during the wire feed process.



#### Wire labelling and processing

To ensure optimum positioning of the origin/destination on the wires, the Wire Terminal may be fitted with black, white or both marking systems. Multiple insulation stripping and crimping machines may also be integrated using an optional lift.



#### Selection of wire magazines

The processed wires are sorted into their individual orders by the removal handling system in the removal unit, to which end up to 13 wire rails are inserted in the removal magazine. A servomotor-controlled linear guide monitored by a limit switch positions the removal magazine horizontally on the rail.

# Wire Terminal WT fully automated wire processing machine



The new, compact Wire Terminal WT fully automated wire processing machines produce up to 36 different wires in cross-sections ranging from 0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup> (AWG 20 - 14) automatically, with zero manual intervention.

#### **Design:**

- For fully automatic processing of wire lists for wire assembly
- Optional management of 24 or 36 wires
- Standard wire stores are selected depending on the number of wires
- When using multiple crimping machines for different diameters, the machine may be fitted with a lift option
- Without a lift option, the stripping and crimping machine RC is the ideal choice
- The machine configuration includes a 13-way storage system with wire magazines

#### **Benefits:**

- Faster processes due to fully automated wire processing with individual wire printing and order-picking
- Fully interlinked, from the E-CAD tool through to the production processes
- Increases wire assembly production process to 8 times faster
- Automated design ensures a repeatable, quality product
- Assembled wires from the ordering system can be processed in the subsequent enclosure wiring process stage with the "Smart Wiring" tool from Eplan

#### **Supply includes:**

- Machine frame and housing
- Integral display
- Wire clamp system
- Wire cutting module
- Locator for wire labelling unit
- Turntable and wire routing
- 26 wire magazines as per requirements
- Label printer for wire magazine identification

#### **Machinable material:**

- Fine-wire copper cables to DIN VDE 0295 Category 5

#### **Note:**

- Please contact your Rittal representative for further information.

# Wire Terminal WT fully automated wire processing machine

Model No.	Packs of	4051.024	4051.036
Machine dimensions H x W x D mm (H x W x D in)		2220 x 1950 x 1800 (87.4 x 76.8 x 70.9)	2220 x 1950 x 1800 (87.4 x 76.8 x 70.9)
Footprint size including 2 wire stores H x W x D mm (H x W x D in)		2250 x 1950 x 4000 (88.6 x 76.8 x 157.5)	2250 x 3610 x 4000 (88.6 x 142.1 x 157.5)
Footprint size including 3 wire stores H x W x D mm (H x W x D in)		2250 x 3610 x 4000 (88.6 x 142.1 x 157.5)	2250 x 3610 x 4000 (88.6 x 142.1 x 157.5)
Wires per hour approx.		240	240
Compressed air connection (bar)		6	6
Power consumption (kW approx.)		1	1
Electrical connection (V, ~, Hz)		400, 3~, 50	400, 3~, 50
Frequency (Hz)		50	50
Control voltage V (DC)		24	24
Wire Terminal weight kg (lbs)		1100 (2425.0)	1100 (2425.0)
Weight per wire store, unloaded kg (lbs)		130 (286.6)	130 (286.6)
Eplan interfaces		Pro Panel Smart Wiring	Pro Panel Smart Wiring
Safety devices		The machine interior is fully encapsulated. The machine zone allows access from 4 sides, monitored via contactless safety limit switches on the bifold doors.	

## Also required

Crimping machine R8-I	1 pc(s).	4051.021	4051.021
Crimping machine RC-I	1 pc(s).	4051.020	4051.020
Wire ferrules	1 pc(s).	see pages 18-23	see pages 18-23
Wire store for WT, central unit	1 pc(s).	4051.026	4051.026
Wire store for WT, additional module, left	1 pc(s).	4051.027	4051.027
Wire store for WT, additional module, right	1 pc(s).	4051.028	4051.028

## Machine option

Lift option	1 pc(s).	4051.025	4051.025
Printer option, black	1 pc(s).	4051.029	4051.029
Printer option, white	1 pc(s).	4051.030	4051.030
Wire rail magazine 0.5 mm <sup>2</sup>	1 pc(s).	4051.040	4051.040
Wire rail magazine 0.75 mm <sup>2</sup>	1 pc(s).	4051.041	4051.041
Wire rail magazine 1.0 mm <sup>2</sup>	1 pc(s).	4051.042	4051.042
Wire rail magazine 1.5 mm <sup>2</sup>	1 pc(s).	4051.043	4051.043
Wire rail magazine 2.5 mm <sup>2</sup>	1 pc(s).	4051.044	4051.044

# Rittal – The System.

Faster – better – worldwide.

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

## Rittal North America LLC

Woodfield Corporate Center  
425 North Martingale Road, Suite 400 • Schaumburg, Illinois 60173 • USA  
Phone: 937-399-0500 • Toll-free: 800-477-4000  
Email: [rittal@rittal.us](mailto:rittal@rittal.us) • Website: [www.rittal.us](http://www.rittal.us)

## Rittal Systems Ltd.

6485 Ordan Drive • Mississauga, Ontario L5T 1X2 • Canada  
Phone: 905-795-0777 • Toll-free: 800-399-0748  
Email: [marketing@rittal.ca](mailto:marketing@rittal.ca) • Website: [www.rittal.ca](http://www.rittal.ca)

## Rittal Mexico

Dr. Roberto Gayol 1219-1B • Col. Del Valle Sur, 03100 • Mexico, D.F.  
Phone: (+52) (55) 5559-5369 • Toll-free: 01 800 8 Rittal (748.825)  
Email: [info@rittal.com.mx](mailto:info@rittal.com.mx) • Website: [www.rittal.com.mx](http://www.rittal.com.mx)

US445 ■ 6/19

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES

FRIEDHELM LOH GROUP

