MARKING system

Automated industrial identification

Greater efficiency in control cabinet building
Automated industrial identification

Clear, easily visible, and permanent identification increases safety and simplifies workflows. All work processes throughout the product lifecycle of a control cabinet can be performed more efficiently if all the components are uniformly and clearly marked. Up to 30% of the total production time of a control cabinet is spent just printing, separating, and mounting markings. The THERMOMARK E SERIES is the first modular marking system to combine the printing and applying of marking materials in just a single automated process step, resulting in time savings of approximately 60%.

THERMOMARK E SERIES – modular marking system

Maximum efficiency

Save approximately 60% of the time spent on industrial identification. Thanks to the modular THERMOMARK E SERIES system, you can print and apply markings in just a single automated process step. During order peaks, productivity can be increased significantly using the same number of employees. Instead of laborious, manual processing steps, you experience an easy and particularly efficient kind of identification.

Flexible response

Combine the standard thermal transfer roll printer with one of the four applicators to carry out different identification tasks. Whether you need radially and axially movable cable markers, wire-wrap labels with protective foil, shrink sleeves, or terminal identification in continuous format, your system will be ready for use in just a few steps. In project business in particular, this provides the crucial advantage of being able to respond flexibly to specific customer or application requirements. This not only conserves resources, but also saves space.

Consistently digital workflows

Application-specific data exports from common E-CAD programs ensure automatic and time-saving data processing. A wide range of intuitive functions are available that make it easy for you to create marking data. The marking software guides you step by step through the entire cable identification process – both via the display on the printer when working directly at the control cabinet and via the marking software on the desktop PC.

Easy handling and high quality

The THERMOMARK E SERIES features intuitive operation and provides a consistently high level of efficiency over the entire working day. The automated printing and applying process makes handling easy and ensures a consistently high level of marking quality at all times, as it cannot be impacted by human fatigue. This in turn has a positive effect on the longevity and durability of the identification solution. Accurate planning in terms of productivity and quality is now possible, even in the field of industrial identification.

Printing and applying in a single step

Flexible for your tasks

With the THERMOMARK E SERIES, you have four different applicators at your disposal. For efficient, automated wire and cable identification, you can choose between three different types of marking: movable cable markers, wire-wrap labels with protective laminate, or shrink sleeves and marking sleeves. For the efficient identification of entire terminal strips with different pitches, you just need two materials in continuous format.

THERMOMARK E.300 (D) / E.600 (D)
Combine one of the thermal transfer roll printers with one of the applicators. In just a few steps, the system is ready for the desired identification task. You can choose between a print resolution of 300 or 600 dpi. The D version of the printers has an integrated take-up hub and is compatible with all four applicators.

THERMOMARK E.WIRE
The THERMOMARK E.WIRE marks wires and cables with a radially and axially movable marking that can be marked on three sides. The hot-sealed joint ensures that the marker remains captive. Thanks to the continuous format, all diameters between 1.8 and 5.6 mm are marked with just one material. To simplify operation, the cable diameter is measured automatically. Based on this measurement, the software helps determine the optimum size of the marker.

THERMOMARK E.300 (D) / E.600 (D)
Versatile thermal transfer roll printer

THERMOMARK E.WIRE
Variable wire and cable identification

THERMOMARK E.WRAP
The THERMOMARK E.WRAP automatically applies wire-wrap labels to cylindrical objects that are between 2 and 16 mm in diameter. A transparent laminate covers the printed area and protects it completely from external influences. To make handling as easy as possible, the device features an adjustable scale that ensures that the marking is always attached at the desired distance from the cable end.

THERMOMARK E.SLEEVE
The THERMOMARK E.SLEEVE processes shrink sleeves in continuous format and cuts them individually to the desired length. In addition, the applicator opens the shrink sleeve so that it can be easily slid onto wires and cables ranging from 0.8 to 8.5 mm in diameter. Thanks to automatic object detection by means of photoelectric barriers, you can remove ready marked cables very effectively.

THERMOMARK E.VARIO
The THERMOMARK E.VARIO marks entire terminal strips with just two materials in continuous format, regardless of the number of different pitches. This means that any pitch between 3.5 and 1,000 mm can be implemented. Thanks to the innovative geometry of the marking material, you benefit from the material fitting perfectly in the marking groove.

THERMOMARK E.VARIO

Variable terminal identification in continuous format

THERMOMARK E.WRAP

Cable identification with protective laminate

THERMOMARK E.SLEEVE

Cable identification with shrink sleeves in continuous format

Seamless software-supported marking processes

MARKING system software

Target-group-oriented software functions round off the THERMOMARK E SERIES system solution. Powerful interfaces to common E-CAD programs are available for efficient data processing. Application-specific data imports use the information from the digital circuit diagrams and ensure automatic and time-saving data processing for the efficient creation of the corresponding marking solutions.

In the Wire Marking Application Center, production personnel can see the entire project at a glance along with all the detailed information that has been imported from the digital circuit diagram. With the help of this structured information, the user is intuitively guided step by step through the entire wire and cable identification process. This creates additional efficiency and reduces the risk of errors to a minimum.

In addition, the marking software features an interface to clipx ENGINEER, ensuring seamless processes from planning through to production.
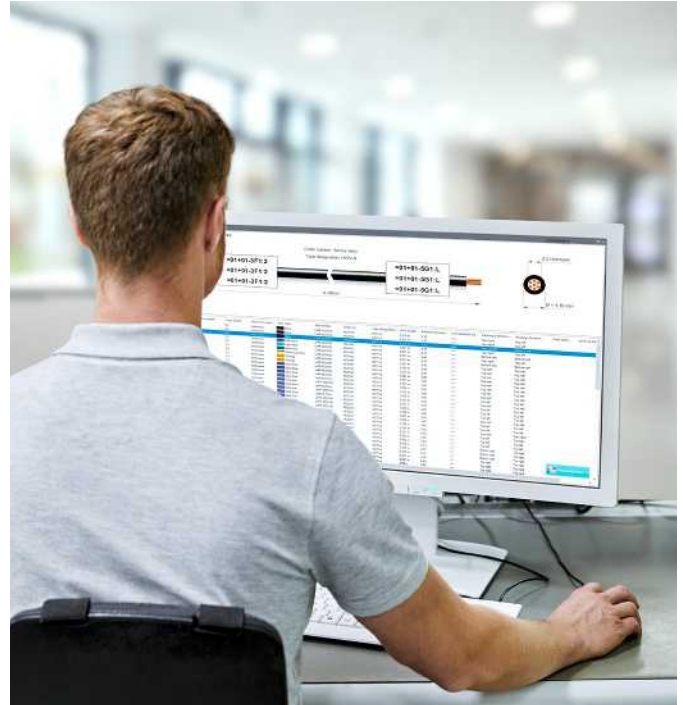
Efficient and consistent processes for data processing

Decentralized marking processes on site

For efficient, automated wire and cable identification processes directly at the control cabinet, where space is very limited, the process-supporting information is conveniently shown on the display of the THERMOMARK E SERIES printers.

This is the same information that is available to you via the desktop marking software in the Wire Marking Application Center. All relevant information is displayed, providing a digital representation of the wires and cables that are to be physically manufactured, including the markings.

This includes, for example, information regarding the various lengths of the individual cables, the cross-sections, the colors, and the number of markings per cable.

In this way, you are guided step by step through the entire identification process, sources of error are reduced, and efficient workflows are made possible even for unskilled workers.

Process-supporting information on the printer display

Centralized marking processes

If all identification processes are carried out centrally in a marking cell, it is essential that all marking systems are controlled and managed from one marking software tool. To do this, the printing systems are usually controlled via Ethernet.

The THERMOMARK E SERIES also offers another advantage: By using the OPC UA bidirectional communication interface, you are informed in real time about the project and operating status of the individual devices. To do this, the printing systems send their current status to the marking software. This means that you are always informed about the progress of the print job or whether there are any malfunctions, such as the marking material or ink ribbon being empty.

This provides the crucial advantage of being able to respond quickly in the event of malfunctions, thus minimizing downtimes.
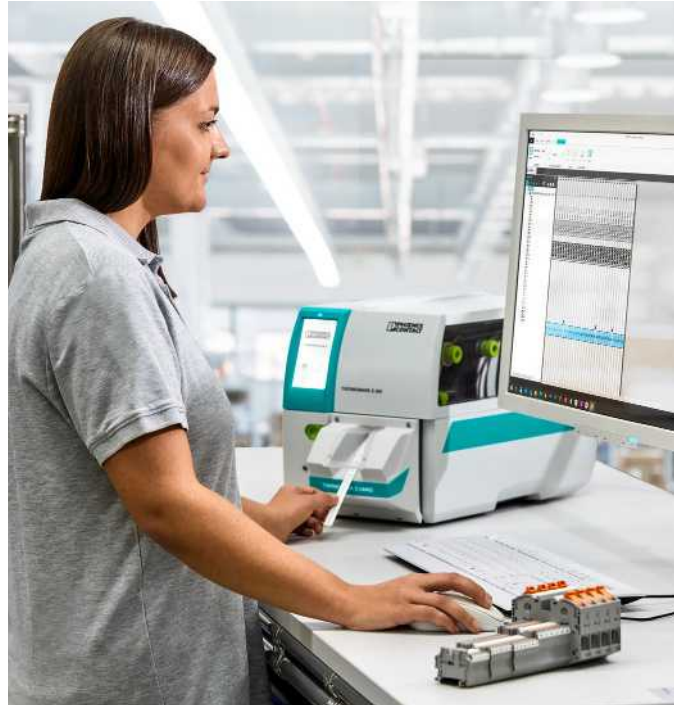
Current project and operating status visible at all times

Worker assistance systems

When it comes to the entire wire and cable processing process, you can achieve maximum efficiency and ergonomics by combining the THERMOMARK E SERIES with the clipx WIRE assist worker assistance system.

The software-supported system guides you step by step through the entire process of semi-automated wire and cable processing, automatically controls the relevant output devices, and provides the necessary information based on the E-CAD data. This enables intuitive workflows even for unskilled workers and minimizes the risk of errors.

In project business, it is possible to respond individually and flexibly to specific customer or application requirements by adapting the equipment to the respective needs. For example, you can also use an additional roll printer for equipment identification or swap the THERMOMARK E.WIRE with the THERMOMARK E.SLEEVE.

In addition, you can optimally adjust the position of all marking systems, automatic tools, and hand tools to your physical height to ensure that workflows are as ergonomic as possible.

Ergonomic and software-supported wire and cable processing

# Industrial identification solutions for maximum efficiency

Variable wire and cable identification

The THERMOMARK E.WIRE applicator creates radially and axially movable cable markers for cylindrical objects, single-core wires, cables, and cable bundles.

It automatically measures the diameter, cuts the ready-printed E-WM... marking foil to the appropriate length, places this around the cylindrical object, and then seals the marker shut with a hot-sealed joint. This ensures that the marker remains captive. The E-WM… continuous format covers all diameters between 1.8 and 5.6 mm with just one material that is available in various widths. Due to the triangular shape of the markers, different information can be printed on each of the three marking areas. This results in excellent visibility of the installed markers. Compared to conventional, manual identification solutions, you can achieve time savings of up to 70% with the applicator. This results in very efficient circuit identification in a control cabinet containing lots of different cross-sections, with the added benefit of using just one marking material.
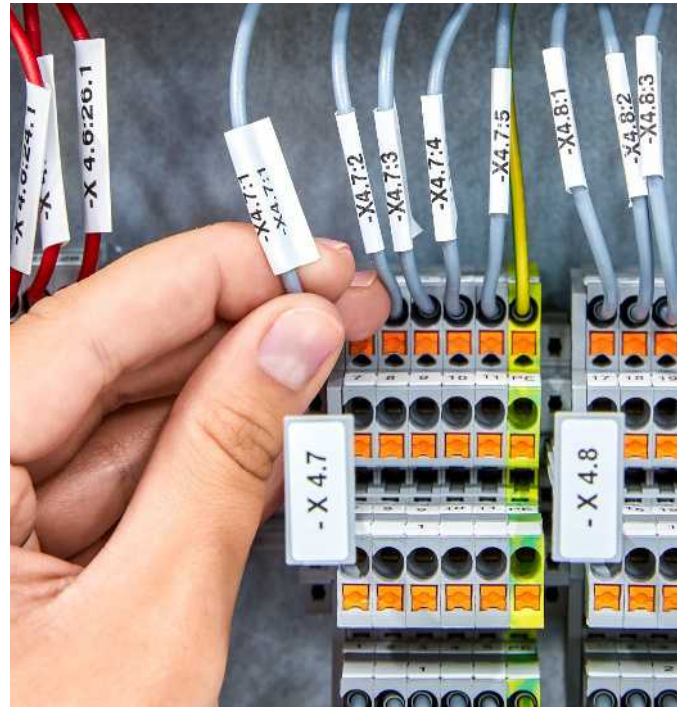
Maximum flexibility with radially and axially movable cable markers

Wire and cable identification with shrink sleeves

With the THERMOMARK E.SLEEVE applicator, you can achieve time savings of up to 75% compared to manual marking processes with shrink sleeves and marking sleeves.

The applicator processes shrink sleeves in continuous format and cuts them individually to any length between 15 and 51 mm. In addition, the applicator opens the individual printed shrink sleeve markers so they can be easily and quickly slid onto cylindrical objects.

Thanks to automatic object detection by means of photoelectric barriers and optimized feed-in, you can remove ready marked wires and cables very effectively. General operation is also as simple as can be: While the applicator covers diameters ranging from 0.8 to 8.5 mm, there is no setup effort involved for you thanks to automatic adjustment to the respective shrink sleeve size.

You have the option of shrinking the marked shrink sleeves from the E-WMS… product family after the printing and applying process.
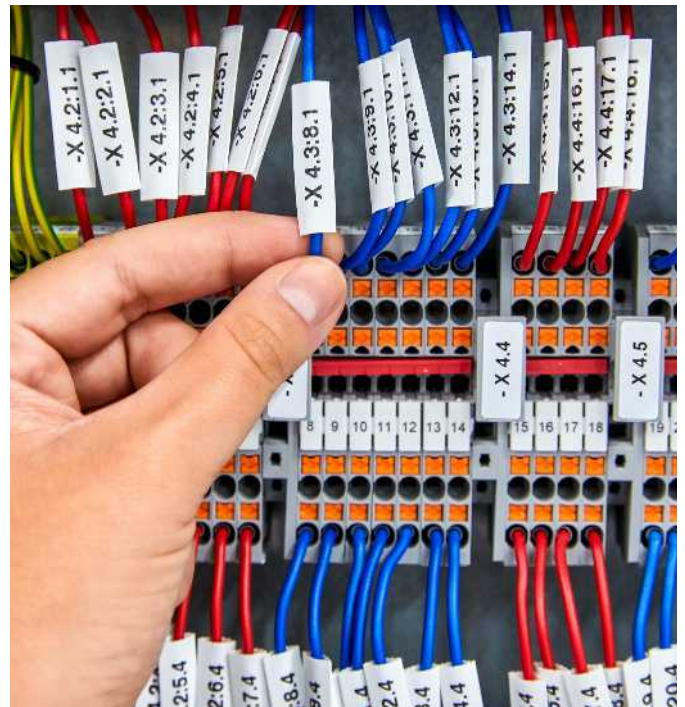
Shrink sleeve markers in individual lengths

Wire-wrap labels with protective laminate

Time savings of up to 60% can be achieved with the THERMOMARK E.WRAP applicator compared to manual identification processes with wire-wrap labels.

The applicator applies the printed E-WML… wire-wrap labels to cylindrical objects, wires, and cables at fixed defined positions, while also ensuring a consistently high level of quality. This is particularly important in the case of wire-wrap labels, as they have an additional protective laminate to protect the printed surface. This provides a high level of resistance to dirt and abrasion, which means that this marking solution can also be used outdoors.

The broad diameter range from 2 to 16 mm supports many different applications inside and outside the control cabinet.

The wire-wrap labels do not create any additional volume, so the marked cable can be pulled through cable ducts, for example, without any problems. To make handling as easy as possible, the device features an adjustable scale that ensures that the marking is always attached at the desired distance from the cable end.

Wire-wrap labels suitable for indoor and outdoor applications

Terminal identification in continuous format

With the THERMOMARK E.VARIO applicator, entire terminal strips can be marked with just two materials in continuous format – regardless of the number of different pitches.

The E-TM… material is for the tall marking groove and the E-TMF… material is for the flat marking groove. Thanks to the special blade geometry, the THERMOMARK E.VARIO perforates and cuts the flexible continuous material variably with a pitch ranging from 3.5 to 1,000 mm – at the exact position specified by the marking software based on the material description.

The printed marking strip is then simply separated along the perforations and snapped into the corresponding marking groove. Thanks to the innovative geometry of the marking material, you benefit from the material fitting perfectly. With this type of terminal strip identification, you can achieve time savings of up to 70%.

Marking the entire terminal strip with just two materials

Product data

THERMOMARK E SERIES printers and accessories

Printers

Type	THERMOMARK E.300	THERMOMARK E.600	THERMOMARK E.300 D	THERMOMARK E.600 D
Item no.*	1285306 1287021 (US), 1287020 (CN), 1287022 (AR), 1287026 (KIT)	1285310 1287029 (US), 1287028 (CN), 1287030 (AR), 1287031 (KIT)	1004303 1287033 (US), 1287032 (CN), 1287034 (AR), 1287038 (KIT)	1004304 1287040 (US), 1287039 (CN), 1287041 (AR), 1287042 (KIT)
Description	Thermal transfer printer, 300 dpi, compatible with THERMOMARK E.WIRE, E.SLEEVE, and E.VARIO	Thermal transfer printer, 600 dpi, compatible with THERMOMARK E.WIRE, E.SLEEVE, and E.VARIO	Thermal transfer printer with internal take-up hub, 300 dpi, compatible with all applicators	Thermal transfer printer with internal take-up hub, 600 dpi, compatible with all applicators

Accessories

* Country-specific versions (US, CN, AR, KIT): Power cable with country-/region-specific pin connector pattern available

Type	THERMOMARK E.CUTTER	THERMOMARK E.CUTTER/P
Item no.	1234241	1201336
Description	Cutter for marking materials in continuous format for cutting custom lengths	Perforation cutter for all shrink sleeve and marking sleeve versions in continuous format for cutting custom lengths

Applicators for THERMOMARK E SERIES

Type	THERMOMARK E.WIRE	THERMOMARK E.SLEEVE	THERMOMARK E.WRAP	THERMOMARK E.VARIO
Item no.	1203216	1192932	1192931	1195972
Description	Applicator for creating E-WM… movable cable markers in continuous format for diameters from 1.8 mm … 5.6 mm	Applicator for cutting and opening E-WMS… shrink sleeves in continuous format for diameters from 0.8 mm … 8.5 mm	Applicator for applying E-WML… wire-wrap labels for diameters from 2 mm … 16 mm	Applicator for cutting and perforating the E-TM… and E-TMF… terminal markings in continuous format to pitches from 3.5 mm … 1000 mm

Wire, cable, and terminal marking

Marking material for the THERMOMARK E.WIRE

Type	Item no.	Description
E-WM (EX15)R	1233940	Cable marker, continuous format, width: 15 mm, white, diameter range: 1.8 mm ... 5.6 mm, roll length: 100 m
E-WM (EX18)R	1234227	Cable marker, continuous format, width: 18 mm, white, diameter range: 1.8 mm ... 5.6 mm, roll length: 100 m
E-WM (EX23)R	1234231	Cable marker, continuous format, width: 23 mm, white, diameter range: 1.8 mm ... 5.6 mm, roll length: 100 m

Marking material for the THERMOMARK E.SLEEVE

Type	Item no.	Description
E-WMS 2,4 (EX4)R	1221568	Shrink sleeve, continuous format, width: 4 mm, white, diameter range: 0.8 mm ... 1.5 mm, shrink rate: 3:1, cUL 224, roll length: 30 m
E-WMS 3,2 (EX5)R	1221582	Shrink sleeve, continuous format, width: 5 mm, white, diameter range: 1.0 mm ... 3.0 mm, shrink rate: 3:1, cUL 224, roll length: 30 m
E-WMS 4,8 (EX9)R	1221574	Shrink sleeve, continuous format, width: 9 mm, white, diameter range: 1.6 mm ... 4.5 mm, shrink rate: 3:1, cUL 224, roll length: 30 m
E-WMS 6,4 (EX10)R	1221580	Shrink sleeve, continuous format, width: 10 mm, white, diameter range: 2.1 mm ... 6.0 mm, shrink rate: 3:1, cUL 224, roll length: 25 m

Marking material for the THERMOMARK E.WRAP

Type	Item no.	Description
E-WML 4 (25X6)R	1343120	Wire-wrap label, lettering field size: 25 x 6 mm, white, diameter range: 2.0 mm ... 4.0 mm, UL 969, quantity of labels: 7450
E-WML 6 (25X13)R	1343122	Wire-wrap label, lettering field size: 25 x 13 mm, white, diameter range: 3.4 mm ... 6.0 mm, UL 969, quantity of labels: 4750
E-WML 8 (51X13)R	1199676	Wire-wrap label, lettering field size: 51 x 13 mm, white, diameter range: 4.0 mm ... 8.1 mm, UL 969, quantity of labels: 4000
E-WML 14 (25X19)R	1199679	Wire-wrap label, lettering field size: 25 x 19 mm, white, diameter range: 6.0 mm ... 14.2 mm, UL 969, quantity of labels: 2450

Marking material for the THERMOMARK E.VARIO

Type	Item no.	Description
E-TM (EX10)R	1196222	Terminal marker, continuous format, for tall marking groove, white, pitch: 3.5 mm ... 1000 mm, roll length: 3.1 m
E-TM (EX10)RL	1196223	Terminal marker, continuous format, for tall marking groove, white, pitch: 3.5 mm ... 1000 mm, roll length: 31 m
E-TMF (EX5)R	1196220	Terminal marker, continuous format, for flat marking groove, white, pitch: 3.5 mm ... 1000 mm, roll length: 7.8 m
E-TMF (EX5)RL	1196221	Terminal marker, continuous format, for flat marking groove, white, pitch: 3.5 mm ... 1000 mm, roll length: 78 m

Further versions can be found online.

Find out more about the THERMOMARK E SERIES:
Scan the QR code or enter the web code into the search field on our website.

ℹ **Web code:** #3155