

**Temperaturüberwachungsrelais**  
Temperature monitoring relay  
Relais thermostatique  
Relé de vigilancia/monitorización de temperatura  
Relè di sorveglianza temperaturas  
Relé de controle de temperatura

**C512**  
**C513**

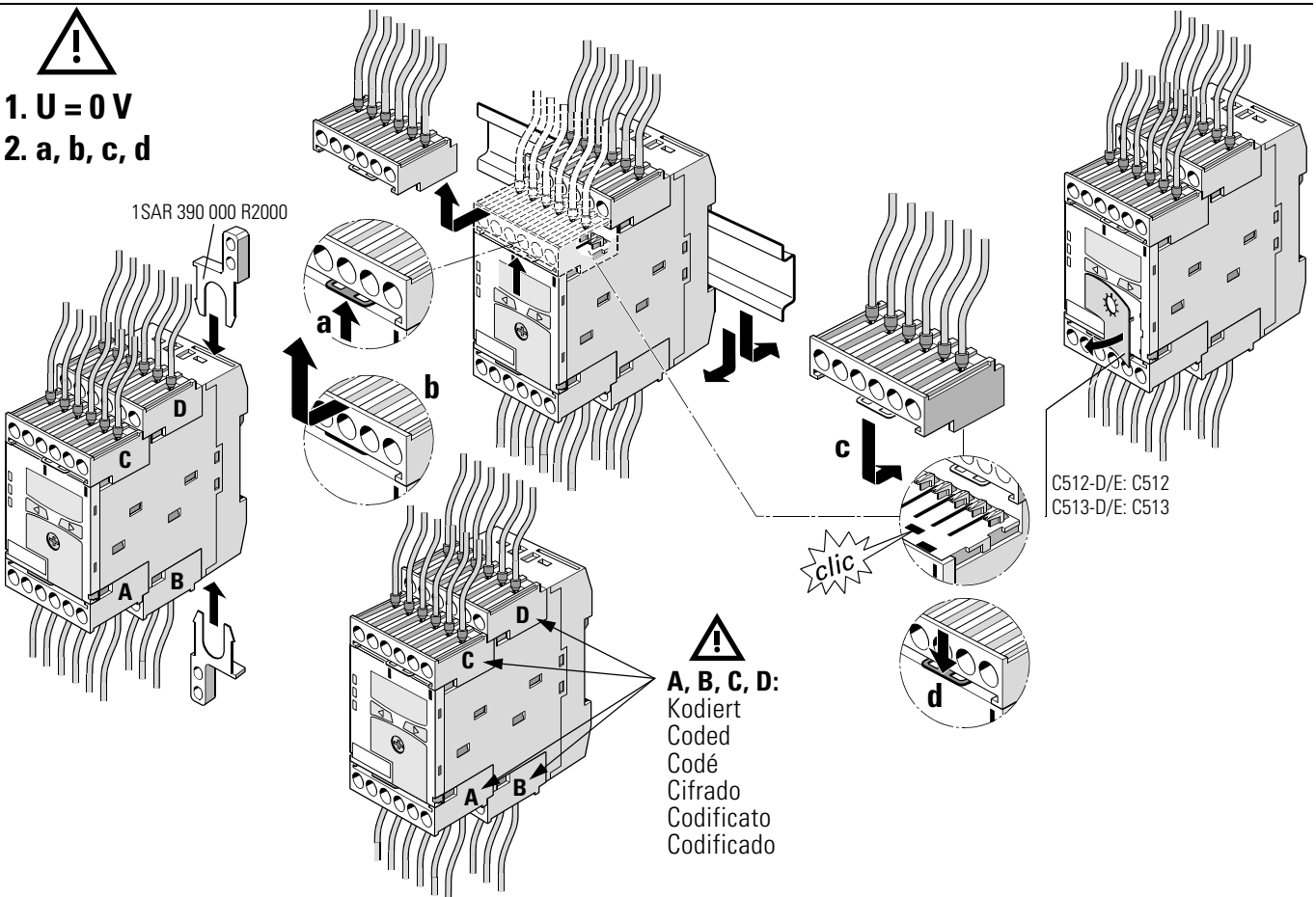


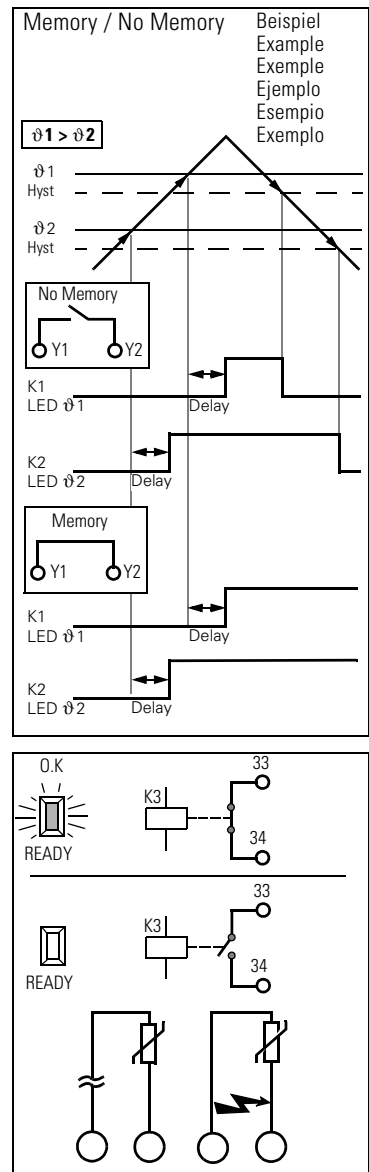
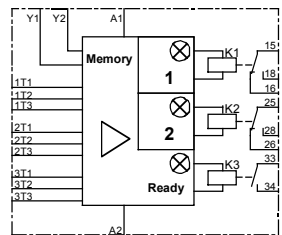
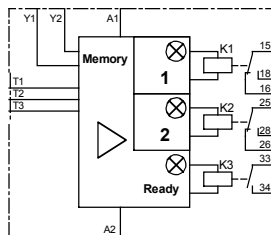
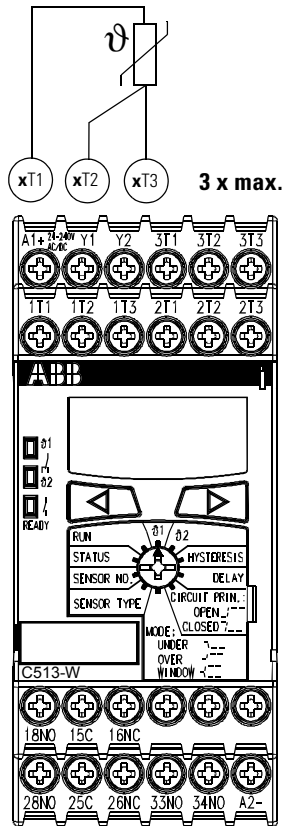
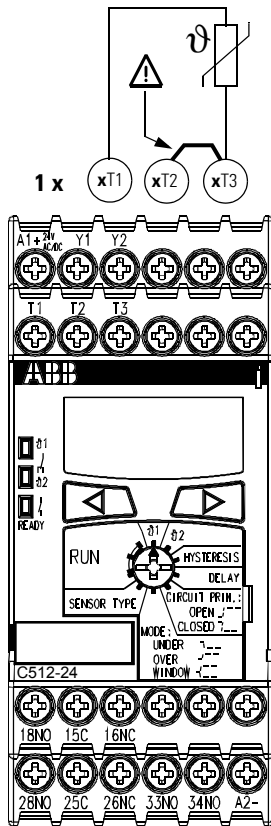
<b>Betriebsanleitung</b> <b>Instructivo</b>	<b>Operating Instructions</b> <b>Istruzioni di servizio</b>	<b>Instructions de service</b> <b>Instruções de Serviço</b>	<b>Bestell-Nr./Order No.: 2CDC 112 095 M9701</b>
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Vor der Installation, dem Betrieb oder der Wartung des Geräts muss diese Anleitung gelesen und verstanden werden.  
Read and understand these instructions before installing, operating, or maintaining the equipment.  
Ne pas installer, utiliser ou entretenir cet équipement avant d'avoir lu et assimilé ce instructions.  
Leer y comprender este instructivo antes de la instalación, operación o mantenimiento del equipo.  
Leggere con attenzione questi istruzioni prima di installare, utilizzare o eseguire manutenzione su questa apparecchiatura.  
Ler e compreender estas instruções antes da instalação, operação ou manutenção do equipamento.

	<p><b>⚠ GEFAHR</b></p> <p>Gefährliche Spannung. Lebensgefahr oder Gefahr schwerer Verletzung. Vor Beginn der Arbeiten Anlage und Gerät spannungsfrei schalten.</p>	<p><b>⚠ DANGER</b></p> <p>Hazardous voltage. Will cause death or serious injury. Disconnect power before working on equipment.</p>	<p><b>⚠ DANGER</b></p> <p>Tension dangereuse. Danger de mort ou risque de blessures graves. Mettre hors tension avant d'intervenir sur l'appareil.</p>
	<p><b>⚠ PELIGRO</b></p> <p>Tensión peligrosa. Puede causar la muerte o lesiones graves. Desconectar la alimentación eléctrica antes de trabajar en el equipo.</p>	<p><b>⚠ PERICOLO</b></p> <p>Tensione pericolosa. Può provocare morte o lesioni gravi. Scollegare l'alimentazione prima di eseguire eventuali interventi all'equipaggiamento.</p>	<p><b>⚠ PERIGO</b></p> <p>Tensão perigosa. Perigo de morte ou ferimentos graves. Desligue a corrente antes de trabalhar no equipamento.</p>

Eine sichere Gerätefunktion ist nur mit zertifizierten Komponenten gewährleistet!  
Reliable functioning of the equipment is only ensured with certified components.  
Le fonctionnement sûr de l'appareil n'est garanti qu'avec des composants certifiés.  
El funcionamiento seguro del aparato sólo está garantizado con componentes certificados.  
Il funzionamento sicuro dell'apparecchiatura viene garantito soltanto con componenti certificati.  
O funcionamento seguro do aparelho apenas pode ser garantido se forem utilizados os componentes certificados.





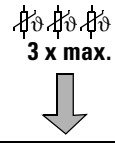
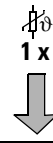
<b>⚠ ACHTUNG</b>	<b>⚠ ATTENTION</b>	<b>⚠ IMPORTANT</b>
Das Temperaturüberwachungsrelais C512/C513 wurde als Gerät der Klasse A gebaut. Der Gebrauch dieses Produkts in Wohnbereichen könnte zu Funkstörungen führen.	The temperature monitoring relay C512/C513 has been designed for class A equipment. Use of the product in domestic environments can cause radio interference.	Le relais thermostatique C512/C513 est conçu en tant qu'appareil de classe A. L'utilisation de ce produit dans le domaine résidentiel pourrait entraîner des perturbations radioélectriques.
<b>⚠ ATENCIÓN</b>	<b>⚠ ATTENZIONE</b>	<b>⚠ ATENÇÃO</b>
El relé de vigilancia/monitorización de temperatura C512/C513 ha sido diseñado para equipos de clase A. El uso de este producto en entorno doméstico puede ocasionar radiointerferencias.	L' relè di sorveglianza temperaturas C512/C513 è stato costruito come apparecchio della classe A. L'uso in area domestica potrebbe essere causa di radiodisturbi.	A relé de controle de temperatura C512/C513 foi construída em forma de dispositivo da classe A. A operação deste dispositivo em áreas de habitação pode provocar falhas de funcionamento.


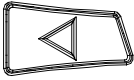
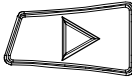
## Inbetriebnahme / Startup / Mise en service / P. en servicio / Messa in servizio / Acionamento

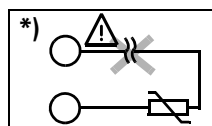
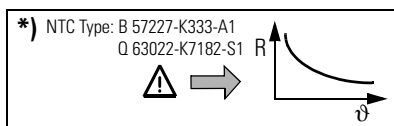
- 1 Power On (A1,A2)
  - 2 ø1, ø2, HYSTERESIS, DELAY, CIRCUIT PRIN., MODE, SENSORTYPE, SENSOR NO.: STATUS
  - 3 nur / only / seulement / sólo / solo / apenas
  - 4 → RUN
- C513**

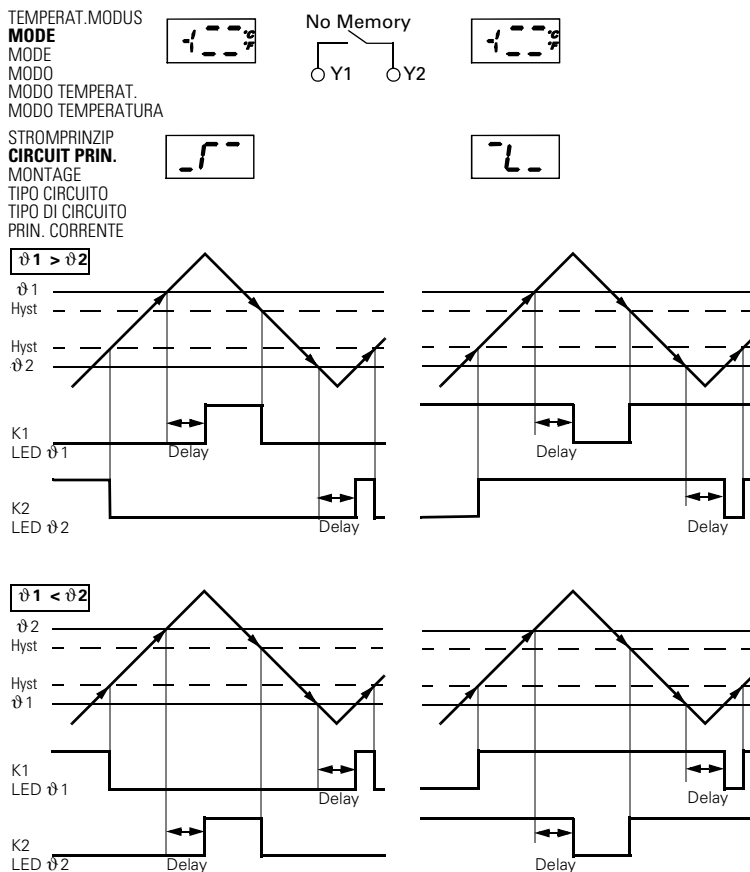
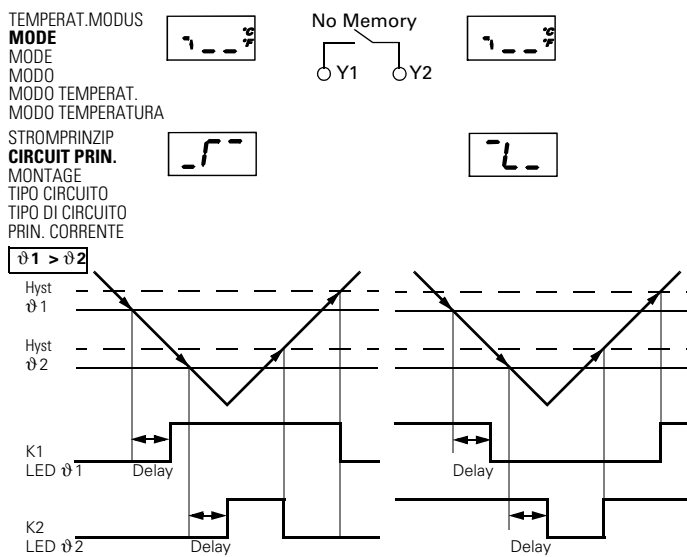
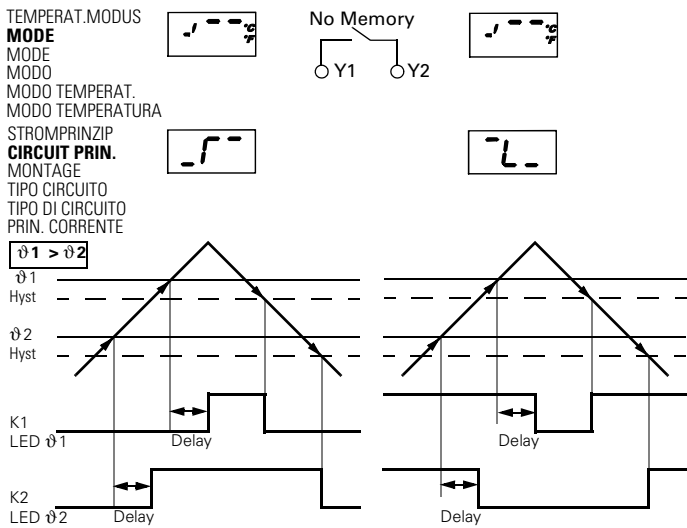


# Menü / Menu / Menú



 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">4</span>	<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">3</span>  	<b>C512</b>  Default	<b>C513</b>  Default
BETRIEB <b>RUN</b> MARCHÉ MARCHA FUNZIONAMENTO OPERAÇÃO	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <span style="font-size: 24px; font-weight: bold;">126</span>°           </div> Aktueller Messwert Actual measured value Mesure actuelle Valor medido actual Valore attuale di misura Valor medido atual		
∅1	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <span style="font-size: 24px; font-weight: bold;">-99</span>°           </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <span style="font-size: 24px; font-weight: bold;">999</span>°           </div>	<input type="radio"/> 80 °C/176 °F	<input type="radio"/> 80 °C/176 °F
∅2	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <span style="font-size: 24px; font-weight: bold;">-99</span>°           </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <span style="font-size: 24px; font-weight: bold;">999</span>°           </div>	<input type="radio"/> 50 °C/122 °F	<input type="radio"/> 50 °C/122 °F
HYSTERESE <b>HYSTERESIS</b> HYSTERESIS HISTERESIS ISTERESI HISTERESE	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <span style="font-size: 24px; font-weight: bold;">1</span>°           </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <span style="font-size: 24px; font-weight: bold;">99</span>°           </div>	<input type="radio"/> 5 °C/5 °F	<input type="radio"/> 5 °C/5 °F
VERZ.-ZEIT <b>DELAY</b> TEMPORIS. TEMPORIZACION TEMPORIZAZIONE TEMPO RETARD.	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <span style="font-size: 24px; font-weight: bold;">0</span> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <span style="font-size: 24px; font-weight: bold;">999</span> </div> Sekunden Seconds Secondes Segundos Secondi	<input type="radio"/> 1	<input type="radio"/> 1
STROMPRINZIP <b>CIRCUIT PRIN.</b> MONTAGE TIPO CIRCUITO TIPO DI CIRCUITO PRIN. CORRENTE	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">-</span> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">L</span> </div> </div> ARBEITS- OPEN CRT TRAVAIL N. ABIERTO C. DI LAVORO CORR. TRAB. RUHE- CLOSED COURANT REPOS N. CERRADO C. DI RIPOSO CORR. REPOUSO	<input type="radio"/> CLOSED	<input type="radio"/> CLOSED
TEMPERAT.MODUS <b>MODE</b> MODE MODO MODO TEMPERAT. MODO TEMPERATURA	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">-</span> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">-</span> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">-</span> </div> </div> UNTERSCHREIT. UNDER DEPASS. BAS REBASE BAJO SOTTO IL LIMITE EXCED. INFERIOR ÜBERSCHREIT. OVER DEPASS. HAUT REBASE ALTO SOPRA IL LIMITE EXCED. SUPERIOR FENSTER WINDOW FENETRE VENTANA JANELA	<input type="radio"/> OVER	<input type="radio"/> OVER
FÜHLER TYP <b>SENSOR TYPE</b> TYPE SONDE TIPO DE SENSOR TIPO DI SENSORE TIPO DE SENSOR	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">100</span> PT100           </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">1000</span> PT1000           </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">K83</span> KTY83           </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">K84</span> KTY84           </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">NTC</span> NTC *)           </div> </div>	<input type="radio"/> PT100	<input type="radio"/> PT100
FÜHLERZAHL <b>SENSOR NO.</b> NB. SONDÉS Nº DE SENSORES N. DI SENSORI N.º SENSOR	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">3</span> 3           </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">2</span> 2           </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <span style="font-size: 24px; font-weight: bold;">1</span> 1           </div> </div>	<input type="radio"/> —	<input type="radio"/> 3
STATUS <b>STATUS</b> ETAT ESTADO STATO	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <span style="font-size: 24px; font-weight: bold;">n_n</span> </div> siehe Seite 5 see page 5 voir page 5 ver página 5 vedi página 5 vide página 5	<input type="radio"/> —	<input type="radio"/> 

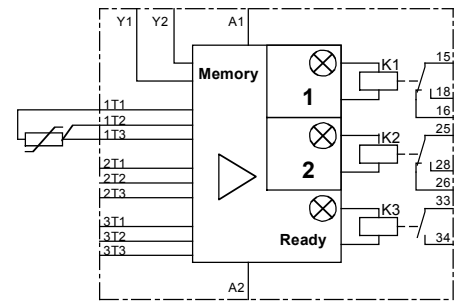




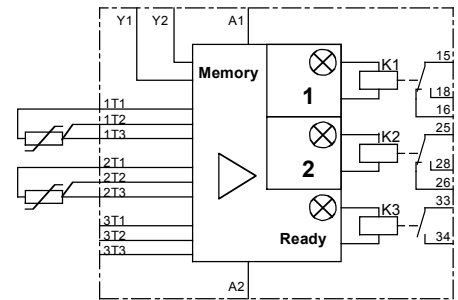
FÜHLERZAHL  
**SENSOR NO.**  
NB. SONDÉS  
N.º DE SENSORES  
N. DI SENSORI  
N.º SENSOR

nur / only / seulement / sólo / solo / apenas

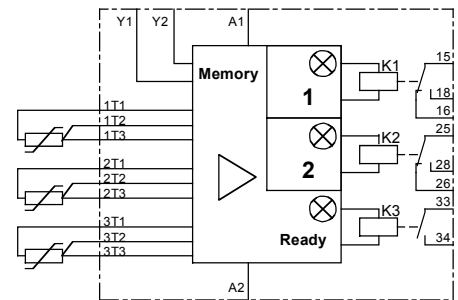
**C513**



1



2



3

Anzeige bei BETRIEB nur / only / seulement / sólo / solo / apenas

Display on **RUN**

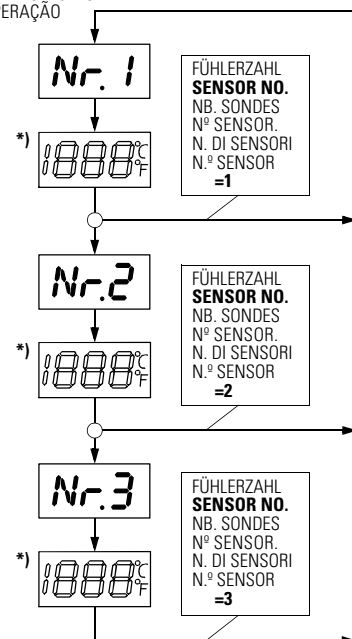
Affichage pour **MARCHE**

Visualización con **MARCHA**

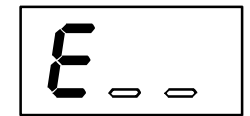
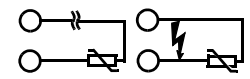
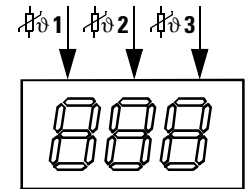
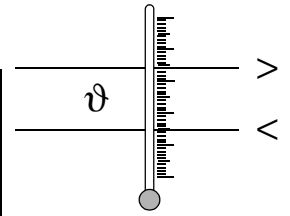
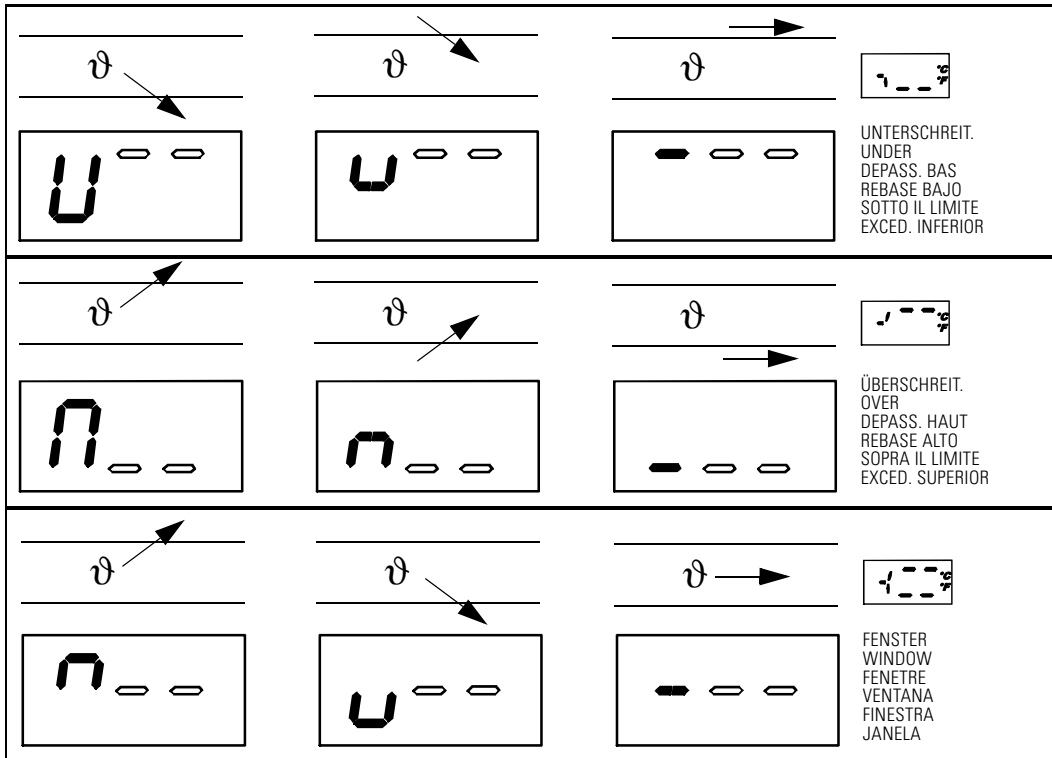
Visualizzazione in **ESERCIZIO**

Ind. durante **OPERAÇÃO**

**C513**



\*) Messwert/Diagnose  
Measured value/Diagnosis  
Val. mesure/Diagnostic  
Medida/Diagnóstico  
Valore di misura/Diagnostica  
Val. medição/Diagnóstico



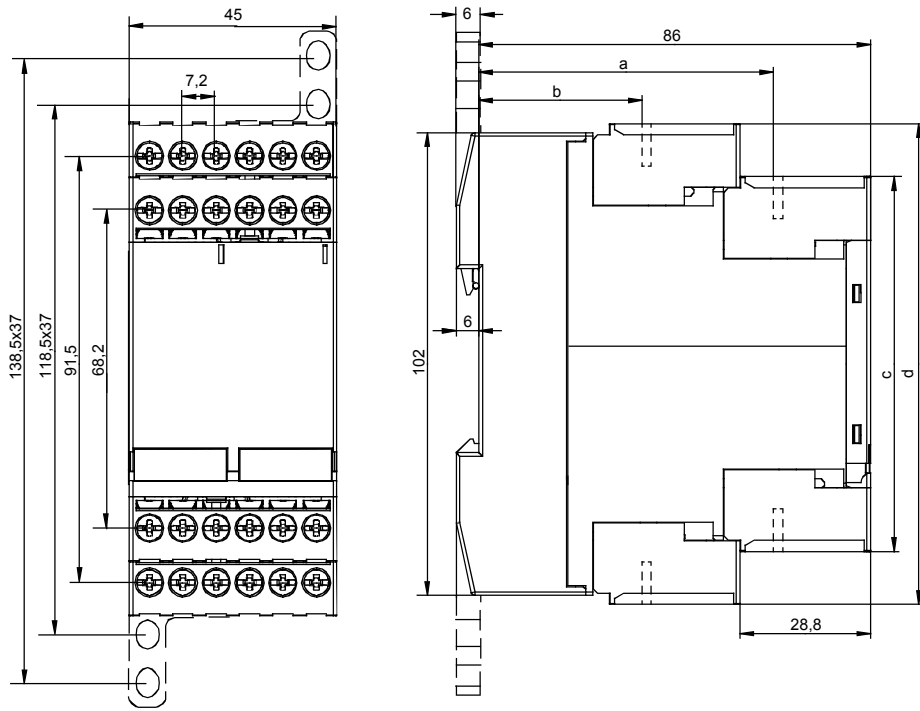
## Diagnose / Diagnosis / Diagnostic / Diagnóstico / Diagnostica / Diagnóstico



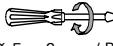



- $\vartheta$  1,  $\vartheta$  2 Einstellung außerhalb des zulässigen Temperaturbereichs des gewählten Fühlers
- Fühler - Kurzschluss
- Fühler - Drahtbruch
- Hysterese > 80 K/80 °F bei NTC
- $\vartheta$  1,  $\vartheta$  2 setting outside permissible temperature range of chosen sensor
- Sensor short-circuit
- Sensor open-circuit
- Hysteresis > 80 K/80 °F with NTC
- $\vartheta$  1,  $\vartheta$  2 Réglage en dehors de la plage de température admise pour la sonde sélectionné
- Court-circuit de sonde
- Rupture de fil de sonde
- Hystérésis > 80 K/80 °F pour NTC
- $\vartheta$  1,  $\vartheta$  2 Ajuste fuera del rango de temperatura permitido del sensor seleccionado
- Cortocircuito en sensor
- Rotura del hilo del sensor
- Histéresis > 80 K/80 °F con NTC
- $\vartheta$  1,  $\vartheta$  2 Impostazione fuori del campo di temperatura ammesso del sensore selezionato
- Cortocircuito del sensore
- Rottura del cavo del sensore
- Isteresi > 80 K/80 °F con NTC
- $\vartheta$  1,  $\vartheta$  2 Ajuste fora da permitida faixa de temperatura do sensor selecionado
- Curto-circuito do sensor
- Quebra do fio do sensor
- Histerese > 80 K/80 °F com NTC



- $\vartheta$  Messwert außerhalb des zulässigen Temperaturbereichs des Fühlers
- $\vartheta$  measured value out of valid sensor temperature range
- $\vartheta$  Valeur de mesure en dehors de la plage de température admise pour la sonde
- $\vartheta$  Valor medido fuera del rango de temperatura permitido del sensor
- $\vartheta$  Valore di misura fuori del campo di temperatura ammesso del sensore
- $\vartheta$  Valor medido encontra-se fora da faixa de temperatura permitida do sensor



	a	b	c	d
<b>C512/C513</b>	65	36	82,6	105,9

	<b>C512 C513</b>
 Ø 5 ... 6 mm / PZ2	0,8 ... 1,2 Nm 7 ... 10.3 lb-in
	1 x 0,5 ... 4,0 mm <sup>2</sup> 2 x 0,5 ... 2,5 mm <sup>2</sup>
	2 x 0,5 ... 1,5 mm <sup>2</sup> 1 x 0,5 ... 2,5 mm <sup>2</sup>
	—
<b>AWG</b>	2 x 20 ... 14