#### **TECHNICAL DATASHEET**





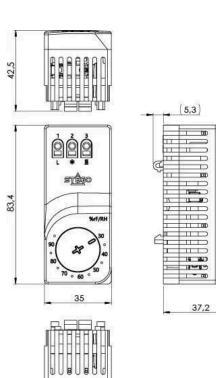
# NEW: MECHANICAL HYGROSTAT

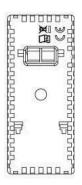
#### **MFR 012**

The hygrostat is used to prevent condensate and regulates heating and fans. From a critical relative air humidity of  $65\,\%$ , the temperature is increased so that the dew point is raised.

- Adjustable relative air humidity
- Change-over contact (heating or cooling)
- High switching performance
- Clip fixing







### **OVERVIEW TECHNICAL DATA**

Device name	New: Mechanical hygrostat
Device type	Hygrostat
Series	MFR 012
Article number	01250.0-00
Setting range	30 % RH - 95 % RH
Contact type	Snap-action contact

2025-07-24 | Specifications are subject to change without notice. Errors and omissions excepted. Suitability of this product for its intended use and any associated risks must be determined by the end customer/buyer in its final application.

## **TECHNICAL DATASHEET**



Casing         Plastic to UL94 V-0, light grey           AC/OC         AC           Operating voltage tolerance maximum         AC 250 V           Inrush current duration         16 A           Switching capacity         AC 5A DC 20 W           Switching current domain         120 VAC           Reference voltage domin canximum         120 VAC           Reference voltage Johnic maximum         0 6 A           Reference voltage domin maximum         30 VDC           Reference voltage domin maximum         10 A 10000 cycles 6 A 50000 cycles           Switching current domin         10 A 10000 cycles 6 A 50000 cycles           Switching differential         4 Rh           Switching differential tolerance         10 A 10000 cycles 6 A 50000 cycles           Switching differential tolerance         15 % RH           Operating temperature         0 °C -60 °C           Operating temperature         0 °C -60 °C           Corage temperature         -40 °C +00 °C           Connection typ         -00 nection terminal (push-in)           Connection typ         -00 recented           Mounting         4 mm           Beight         4 mm           Witching differential referred to 50 % rH. Wire end ferrules must be used for conciton with stranded wives.	Protection type	IP30
Operating voltage tolerance maximum         AC 250 V           Inrush current maximum         16 A           Inrush current duration         10 s           Switching capacity         AC 5 A DC 20 W           Switching current chmic         10 A           Reference voltage chmic maximum         250 VAC           Reference voltage 2 ohmic maximum         0.6 A           Reference voltage domic maximum         30 VDC           Reference voltage domic maximum         20 V           Reference voltage fininum         0.1 A           Switching current         10 A 10000 cycles 6 A 500000 cycles           Switching differential         4 % RH           Switching differential tolerance         2.1,5 % RH           Switching differential tolerance         2.95 % RH           Operating temperature         2.95 % RH           Storage temperature         40 °C -60 °C           Congetion temperature         40 °C -60 °C           Connection type         Connection terminal (push-in)           Beight         Maximum Division terminal (push-in)           Connec	Casing	Plastic to UL94 V-0, light grey
Intrash current duration         16 A           Switching capacity         AC 5 A DC 20 W           Switching current chomic         10 A           Reference voltage chini maximum         250 VAC           Reference voltage 2 chonic maximum         10 VAC           Reference voltage 6 chonic maximum         30 VDC           Reference voltage 6 chonic maximum         30 VDC           Reference voltage for chinimum         20 V           Switching current         10 A 10000 cycles 6 A 50000 cycles           Switching differential         4 % HI           Switching differential lorence         2 1.5 % RI           Switching differential lorence         2 1.5 % RI           Operating temperature         0 °° -6 °°           Operating temperature         30 °° -6 °°           Storage temperature         40 °° -6 °°           Conception from the formule of the rule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm² (with wire en	AC/DC	AC
Invals current duration         10 s           Switching capacity         AC 5 A D 2 0 W           Switching current ohnic         10 A           Reference voltage ohnic maximum         250 VAC           Switching current de ohnic         120 VAC           Reference voltage do ohnic maximum         30 VDC           Reference voltage do ohnic maximum         30 VDC           Switching current de ohnic maximum         10 A 10000 cycles 6 A 50000 cycles           Switching durinet         10 A 10000 cycles 6 A 50000 cycles           Service life         10 A 10000 cycles 6 A 50000 cycles           Switching differential tolerance         4 % RH           Operating temperature         0 °C · 60 °C           Storage humidity         95 % RH           Storage temperature         40 °C · 60 °C           Connection type         Connection terminal (push-in)           Connection type         Connection terminal (push-in)           Connection         3 x stranded wire 1.0 · 2.5 mm² (with wire end ferrule) and rigid wire 1.0 · 2.5 mm²           Design         Bd mm           Witching differential telerance         35 m           Witching differential telerance         35 m           Connection type         Connection terminal (push-in)         Connection terminal (push-in) <tr< th=""><th>Operating voltage tolerance maximum</th><th>AC 250 V</th></tr<>	Operating voltage tolerance maximum	AC 250 V
Switching capacity         AC 5 A D C 20 W           Switching current ohnic         10 A           Reference voltage ohmic maximum         250 V AC           Reference voltage 2 ohmic maximum         120 V AC           Switching current do ohnic         0,6 A           Reference voltage do ohnic maximum         30 V DC           Switching current         10 A 10000 cycles 6 A 50000 cycles           Switching current         10 A 10000 cycles 6 A 50000 cycles           Switching differential         4 % RH           Switching differential tolerance         4 % RH           Operating humidity         95 % RH           Storage temperature         95 % RH           Storage temperature         40 °C · 60 °C           Connection type         Connection terminal (push-in)           Connection type         Connection terminal (push-in)           Connection         3 x stranded wire 1.0 · 2.5 mm² (with wire end ferrule) and rigid wire 1.0 · 2.5 mm²           Design         Cilip for 35 mm DIN tail, EN 60715           Height         35 mm           Witching differential referred to 50 % rls. Wire end ferrules must be used for con-	Inrush current maximum	16 A
Switching current ohmic         10 A           Reference voltage ohmic maximum         250 VAC           Reference voltage 2 ohmic maximum         120 VAC           Switching current dc ohmic         0,6 A           Reference voltage dc ohmic maximum         30 VDC           Reference voltage minimum         20 V           Switching current         0,1 A           Service life         10 A 10000 cycles 6 A 50000 cycles           Switching differential         4 % RH           Switching differential tolerance         1,5 % RH           Operating temperature         0 °C · 60 °C           Operating humidity         95 % RH           Storage temperature         40 °C · 60 °C           Connection type         Connection terminal (push-in)           Connection type         Connection terminal (push-in)           Connection type         Connection terminal (push-in)           Design         Change-over contact           Mounting         Change-over contact           Height         84 mm           Width         3 x sm DIN rail, EN 60715           Height         43 mm           Width         45 mm           Width         45 g           Note thing differential referred to 50 % rH. Wire end ferrules must be u	Inrush current duration	10 s
Reference voltage 2 ohmic maximum         250 VAC           Reference voltage 2 ohmic maximum         200 VAC           Switching current dc ohmic         30 VDC           Reference voltage de ohmic maximum         20 V           Switching current         0,1 A           Service life         10 A 10000 cycles 6 A 50000 cycles           Switching differential         4 % RH           Switching differential tolerance         4 % RH           Operating temperature         0 °C · 60 °C           Operating humidity         95 % RH           Storage temperature         20 °C · 60 °C           Connection type         Connection terminal (push-in)           Connection type         Connection terminal (push-in)           Connection type         Change-over contact           Beign         Change-over contact           Mounting         44 mm           Height         45 mm           Witching         45 mm           Update         45 mm           Witching         45 mm           Wi	Switching capacity	AC 5 A DC 20 W
Reference voltage 2 ohmic maximum     120 VAC       Switching current dc ohmic     0.6 A       Reference voltage dc ohmic maximum     30 VDC       Reference voltage minimum     20 V       Switching current     0.1 A       Service life     10 A 10000 cycles 6 A 50000 cycles       Switching differential     4 % RH       Switching differential tolerance     ± 1,5 % RH       Operating temperature     0 °C · 60 °C       Operating humidity     ±95 % RH       Storage temperature     40 °C · 60 °C       Connection type     Connection terminal (push-in)       Connection type     Connection terminal (push-in)       Design     Change-over contact       Mounting     Height       Height     44 mm       Width     35 mm       Width     43 mm       Weight     45 g       Note     Switching differential referred to 50 % rH. Wire end ferrules must be used for con-	Switching current ohmic	10 A
Switching current dc ohmic         0,6 A           Reference voltage dc ohmic maximum         30 VDC           Reference voltage minimum         20 V           Switching current         0,1 A           Service life         10 A 10000 cycles 6 A 50000 cycles           Switching differential         4 % RH           Switching differential tolerance         ± 1,5 % RH           Operating temperature         0 °C · 60 °C           Operating humidity         ±95 % RH           Storage temperature         40 °C · 60 °C           Connection type         connection terminal (push-in)           Operating         3 x stranded wire 1.0 · 2.5 mm² (with wire end ferrule) and rigid wire 1.0 · 2.5 mm²           Design         Change-over contact           Mounting         4 mm           Width         3 5 mm           Width         3 mm           Weight         45 g           Note         Witching differential referred to 50 % r.H. Wire end ferrules must be used for con-	Reference voltage ohmic maximum	250 VAC
Reference voltage do hmic maximum30 VDCReference voltage minimum20 VSwitching current0,1 AService life10 A 10000 cycles 6 A 50000 cyclesSwitching differential4 % RHSwitching differential tolerance± 1,5 % RHOperating temperature0° C - 60° COperating humidity± 95 % RHStorage humidity± 95 % RHStorage temperatureConnection terminal (push-in)Connection typeconnection terminal (push-in)Connection typeConnection terminal (push-in)DesignChange-over contactMountingChange-over contactHeight84 mmWidth35 mmDepth43 mmWeight45 gNoteSwitching differential referred to 50 % rH. Wire end ferrules must be used for con-	Reference voltage 2 ohmic maximum	120 VAC
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Switching differential       4 % RH         Switching differential tolerance       ± 1,5 % RH         Operating temperature       0 °C - 60 °C         Operating humidity       ≤95 % RH         Storage humidity       ≤95 % RH         Storage temperature       -40 °C - 60 °C         Connection type       Connection terminal (push-in)         Connection       3 x stranded wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm²         Design       Change-over contact         Mounting       Clip for 35 mm DIN rail, EN 60715         Height       84 mm         Width       35 mm         Depth       43 mm         Weight       45 g         Note       Switching differential referred to 50 % rH. Wire end ferrules must be used for con-	Switching current	0,1 A
Switching differential tolerance       ± 1,5 % RH         Operating temperature       0 °C - 60 °C         Operating humidity       ≤95 % RH         Storage humidity       ≤95 % RH         Storage temperature       -40 °C - 60 °C         Connection type       Connection terminal (push-in)         Connection       3 x stranded wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm²         Design       Change-over contact         Mounting       Clip for 35 mm DIN rail, EN 60715         Height       84 mm         Width       35 mm         Depth       43 mm         Weight       45 g         Note       Switching differential referred to 50 % r.H. Wire end ferrules must be used for con-	Service life	10 A 10000 cycles 6 A 50000 cycles
Operating temperature       0 °C - 60 °C         Operating humidity       ≤95 % RH         Storage humidity       595 % RH         Connection       -40 °C - 60 °C         Connection type       Connection terminal (push-in)         Connection       3 x stranded wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm²         Design       Change-over contact         Mounting       Elip for 35 mm DIN rail, EN 60715         Height       84 mm         Width       35 mm         Depth       43 mm         Weight       45 g         Note       Switching differential referred to 50 % rH. Wire end ferrules must be used for con-	Switching differential	4 % RH
Operating humidity       ≤95 % RH         Storage humidity       ≤95 % RH         Storage temperature       -40 °C - 60 °C         Connection type       Connection terminal (push-in)         Connection       3 x stranded wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm²         Design       Change-over contact         Mounting       84 mm         Width       35 mm         Depth       43 mm         Weight       45 g         Note       Switching differential referred to 50 % rH. Wire end ferrules must be used for con-	Switching differential tolerance	± 1,5 % RH
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Note Switching differential referred to 50 % rH. Wire end ferrules must be used for con-	Depth	43 mm
	Weight	45 g
	Note	Switching differential referred to 50 $\%$ rH. Wire end ferrules must be used for connections with stranded wires.

## **PRODUCT VARIANTS**

rticle number

01250.0-00