## Bar-graph Indicator (Model 40005)



Masibus Model 40005 series provides economical, high visibility 101 segment bar-graph display for popular process signals. The scale measures a full 106mm for exceptional visibility over long distance at wide angle. A units-of-measure window allows the scale to be labeled.

Model 40005 Bar-Graph Indicator is a popular replacement for sight-glass or moving coil mechanical displays. With LEDs, there are no moving parts to wear & tear, visibility is excellent and the cost of maintenance is low. Bar-graph meters are an ideal means to display relative values, with no need to interpret numeric data. They are augmented by 4 digit digital display where absolute value is required.

Model 40005 is available in single channel slim line version and dual channel version. The aesthetically designed indicators display process variable on high resolution (1%) bar and full 4 digit numeric display in engineering units.

Model 40005 is equipped with additional features like transmitter power supply to excite field transmitter, isolated retransmission output for recorder and serial communication on RS 485 over MODBUS RTU protocol for PC based data acquisition and reporting system.

Model 40005 optionally provides two configurable alarm set point per channel with individual relays to annunciate operator for abnormal process condition.

The bar-graph housing is made of metallic enclosure and can be panel mounted also. When panel mounted the front of the display is sealed.

## Features

- Microprocessor based top of range digital bar-graph indicator
- Full 4 digit process display & 101 segment bar display
- Wide choice of inputs to select
- Square root extractor
- Fully configurable
  & programmable
  by front keypad
- Digital calibration
- Transmitter Power Supply
- Options :
  - Transmitter power supply
  - Retransmission output (Isolated)
  - RS 485 Serial communication

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Number of Inputs1 or 2UsageAlarm $0/P$ Input Type, Measurement Range & accuracyAs per table 1Number of relay contact outputsTwo per channelSampling Period500 mSRelay Contact terminal3 (No. NC, Common)Burn out current1.2 $\mu$ ADisplay Unit SpeceficationRelay Contact terminal3 (No. NC, Common)Measuring current (RTD)0.166 mADisplay Unit SpeceficationHore Status4 diglt 7- segment Red LED (0.3')Allowable lead-wire resistanceDC input voltage: 1K or lessProcess Value display4 - diglt 7- segment Red LED (0.3')Allowable lead-wire resistanceDS / wire or lessEffect from allowable ignal source resistance: 0.01 % / 100 or lessStatus findicating lamp terestistance: 0.01 % / 100 or lessAllowable lead-wire resistanceTO / RTD: ±10V DCConstruction/Installation/Wiiring ts Bottom Bar DisplayUnder rangeDe voltage: ±20V DCDo voltage: ±20V DCCaseGaneral purposeDe voltage: ±20V DCSourceGase colorMS powder coated with ABS moulded bozelNormal Mode> 100 dB (50 Hz)Mprox. 1.2 kg or less for single channel parle lead-with ABS moulded bozelApprox. 1.2 kg or less for single channelResponse timeInput to ralay ofp1 \$S-90 or IPTS -68Parle LetMasser decament parle lead-with V > 305.mm(M)Response timeInput to ralay ofp1 \$S-90 or IPTS -68Parle LetSisting Midded V > 305.mm(M)Response timeInput to ralay ofp1 \$S-90 or IPTS -68Parle LetContercercercercercercercer	TECHNICAL SPECIFICATIONS	40005	TECHNICAL SP	ECIFICATION	S	40005			
Input Type, Measurement Range à accuracyAs per table 1Number of relay contact outputsTwo per channel $A$ accuracyAs per table 1Sampling PeriodSo mSRelay contact rating230 Vac / 2Amp,Burn out current1.2 $\mu$ ADisplay Units SpecificationSame PV displaySame PV displayMeasuring current (RTD)0.166 mAProcess Value display4 digit 7- segment Red LED (0.3")Input resistanceTC / V: $> 1 M$ Parameter displaySame PV displayAllowable lead-wire resistanceDi (input voltage: K or less Effect from allowable ided wire resistanceEffect from allowable lead wire resistance101 ResolutionAllowable lead-wire resistance15 / wire or less Effect from allowable lead wire resistance101 ResolutionNoAllowable lead-wire resistance15 / wire or less Effect from allowable lead wire resistance101 ResolutionNoAllowable lead-wire resistance15 / wire or less Effect from allowable lead wire resistanceCastruction/Installation/Wiiring LO voltage: ±20 VD CCastruction/Installation/Wiiring LO voltage: ±20 VD CCase colorMS powder coated with ABS moulded bezelNormal Mode> 010 dB (50 Hz) Mormal ModeMS pow of ress of duia channel Parel cut-outApprox. 1.7 kg or less for single channel parel cut-outApprox. 1.2 kg or less for single channel parel cut-out30.5 mm(W) X 138.5 mm(H) 139.5 mm(H)Applicable standard11%-90 or IPTS -68Input to Ralog or Parel cut-outSo met Accuracy ResolutionAdv or 5 \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	Measured Input Signal		Contact Output						
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Sampling Period    500 mS    Relay Contact terminal    20 Var / Zhng.      Burn out current    12 $\mu$ A    Display Unit Specefication    3 (NO, NC, Common)      Measuring current (RTD)    0.166 mA    Process Value display    4- digt 7- segment Red LED (0.3")      Input resistance    DC input voltage: 1K or less    Effect from allowable signal source resistance    15 / Wir or less    Status Indicating Iamp    Red LED's      Allowable lead-wire resistance    15 / Wir or less    LED Bar    101      Allowable lead-wire resistance    15 / Wir or less    LED Bar    101      Allowable lead-wire resistance    15 / Wir or less    LED Bar    101      Allowable lead-wire resistance    15 / Wir or less    LED Bar    101      Allowable lead-wire resistance    15 / Wir or less    Construction/Installation/Wiiring    11 %      Allowable lead-wire resistance    15 / Wir or less    Construction/Installation/Wiiring    MS powder coated with ABS moulded bezel      Allowable lead-wire resistance    15 / Wir or less    Case color    MS powder coated with ABS moulded bezel      Noise Rejection Ratio    Common Mode    > 100 dB (50 Hz)    Approx. 1.2 Kg or less for single channel    Approx. 1.2 Kg or less for single channel	Input Type, Measurement Range		Number of relay	y contact outp	outs Two	Two per channel			
Product termination    3 (ref, ref, community)      Display Unital Specification    3 (ref, ref, community)      Measuring current (RTD)    0.166 mA    Process Value display    4 digit 7 - segment Red LED (0.3")      Input resistance    TC / V:    > 1 M    Parameter display    Same PV display      Allowable lead-wire resistance    Display Unit Specification    Red LED's      Bar Display    Status Indicating Iamp    Red LED's      Allowable lead-wire resistance    15 / viter of less    Effect from allowable lead wire resistance: 0.66°C / 10 or less    LED Bar    101      Allowable lead-wire resistance    16 / viter of less    Construction/Installation/Wiiring    Construction/Installation/Wiiring      Allowable lead wire resistance    16 / viter of less    Construction/Installation/Wiiring    Case    General purpose      Allowable lead wire resistance    100 dB (50 Hz)    Weight    Approx. 1.2 kg or less for single channe how bezel      Noise Rejection Ratio    2 vC (10 to 55°C)    Dimensions (single channel)    36(W) x 144(H) x 245(D) (all in mm)      Applicable standard    17S-90 or IPTS -68    Parameter display    Ease    Ease    Colo to 120° C    40(W) x 144(H) x 245(D) (all in mm)      Applicable standard		•	Relay contact r	ating	230	Vac / 2Amp.			
Measuring current (RTD)0.166 mAProcess Value display4 - digit 7 - segment Red LED (0.3')input resistanceTC / V: > 1 MParameter displaySame PV displayAllowable lead-wire resistanceDC input voltage: 1K or less Effect from allowable isginal source resistance: 0.01 % / 100 or lessStatus Indicating lampRed LED'sAllowable lead-wire resistance15 / wire or less Effect from allowable lead wire resistance: 0.66°C / 10 or lessLED Bar101 ResolutionAllowable lead wire resistance:C/R / TD: ±10V DC DC voltage: ±20V DCCaseGeneral purposeDC voltage: ±20V DCCaseGeneral purposeDo romon Mode> 100 dB (50 Hz) Normal ModeMS powder coated with ABS moulded bezelNormal Mode> 500 dB (50 Hz) Mormal ModeApprox. 1.2 kg or less for single channel poplicable standardSingle channel mession (single channel)Single x 240(D) (all in mn) Panel cut-outResponse timeInput to relay or/p< 5 Sec. Input to relay or/p1 second relas, 63%(10 - 90%)Measurement Accuracy ThermocouplesMeasurement Accuracy ThermocouplesNameAvond CouplesOne per channelMay Dam Allow State (display)Measurement Accuracy ThermocouplesEffect from Single channel Maprox 1.7 kg or less for single channel Dimensions (single channel)Single channel Single channelNomer of outputsOne per channelMay Dam Allow Single channelSingle channel Maprox 1.7 kg or less for single channel Dimensions (single channel)Single channel Maprox 1.7 kg or less for single channel Dimensions (sing	Sampling Period	500 mS	Relay Contact t	erminal	3 (N	3 (NO, NC, Common)			
Input resistance    TC / V: >1 M    Process Value (Usplay)    4 - Ug(1 / Segmeth Ref LeD (0.3 / S))      Allowable lead-wire resistance    DC input voltage: 1K or less Effect from allowable signal source resistance: 0.01 % / 100 or less    Statue (Usplay)    Statue (Usplay)    Statue (Usplay)    Statue (Usplay)      Allowable lead-wire resistance    15 / wire or less Effect from allowable lead wire resistance: 0.01 % / 101 or less    Statue (Usplay)    Stat	Burn out current	1.2 μA	Display Unit S						
Allowable lead-wire resistance    DC input voltage: 1K or less Effect from allowable signal source resistance: 0.01 % / 100 or less    Statuse indicating lamp    Red LED's      Allowable lead-wire resistance    15 / wire or less Effect from allowable lead wire resistance: 0.66°C / 10 or less    LED Bar    101      Allowable lead wire resistance    15 / wire or less Effect from allowable lead wire resistance: 0.66°C / 10 or less    LED Bar    101      Allowable lad wire resistance    15 / wire or less Effect from allowable lead wire resistance: 0.66°C / 10 or less    LED Bar    101      Allowable lad wire resistance    16 C / RTD: ±10V DC    Construction/Installation/Wiiring    Under range      Allowable lad wire resistance    10 / 0.06 (50 Hz)    Case color    Dark Grey      Power supply    90 - 270VAC / 24 VDC    Case color    Dark Grey      Normal Mode    > 50 dB (50 Hz)    Approx. 1.7 kg or less for single channel      Applicable standard    ITS-90 or IPTS -68    Panel cut-out    35.0mm(W) X 138.5mm(H)      Resolution    14½ bits    Imput to Analog o/p    1 second or less, 63%(10 - 90%)    Panel cut-out    68(W) x 138(H) (all in mm)      Panel cut-out    1 second or less, 63% (10 - 90%)    TAELE 1    Termocouples    E -200 to 1000 °C ± (0.1% of FS ± 1 count) <tr< td=""><td>Measuring current (RTD)</td><td>0.166 mA</td><td>Process Value</td><td>display</td><td>4- di</td><td colspan="4">4- digit 7- segment Red LED (0.3")</td></tr<>	Measuring current (RTD)	0.166 mA	Process Value	display	4- di	4- digit 7- segment Red LED (0.3")			
Effect from allowable signal source resistance:  Display  Interview    Allowable leadwire resistance  15  / wire or less  LED Bar  101    Resolution  15  / wire or less  15    Allowable Input Voltage  C / RTD: ± 10V DC  Construction/Installation/Wiiring  101    Rowable Input Voltage  C / RTD: ± 10V DC  Case  General purpose    Power supply  90 - 270VAC / 24 VDC  Case  General purpose    Noise Rejection Ratio  Construction/Installation/Wiiring  MS powder coated with ABS moulded bezel    Normal Mode  > 50 dB (50 Hz)  Case color  Dark Grey    Reference junction compensation error  ± 2° C (10 to 55°C)  Dimensions (single channel)  36(W) x 144(H) x 245(D) (all in mm)    Applicable standard  TB> second or less, 63%(10 - 90%)  Dimensions (single channel)  36(W) x 144(H) x 245(D) (all in mm)    Response time  Dimensions (dual channel)  T  72(W) x 144(H) x 245(D) (all in mm)    Input to relay o/p  < 5 Sec.	Input resistance	TC / V : >1 M	Parameter disp	lay	Sam	• • • • • •			
Reference      resistance      0.01 % / 100 or less Effect from allowable lead wire resistance: 0.6°C / 10 or less Effect from allowable lead wire resistance: 0.6°C / 10 or less      Bar Display      101 Resolution      101 Resolution        Allowable Input Voltage      TC / RTD: ± 10V DC      Construction/Installation/Wilir/J      Under range        Power supply      90 - 270VAC / 24 VDC      Case      General purpose        Power supply      90 - 270VAC / 24 VDC      Case color      Dark Grey        Noise Rejection Ratio      Case color      Dark Grey      Dark Grey        Normal Mode      > 500 dB (50 Hz)      Case color      Approx. 1.2 kg or less for single channel bezel        Applicable standard      TTS-90 or IPTS -68      Dimensions (single channel lnput to relay o/p      SGeneral Purpose        Input to relay o/p      < 5 Sec.	Allowable lead-wire resistance		Status Indicatin	g lamp	Red	LED's			
Andwable lead wire resistance1'sNie Orless tst Bottom Bar Display1% tst Bottom Bar DisplayHere tst Bottom Bar DisplayUnder rangeAllowable lenput VoltageTC / RTD: $\pm 10V$ DC DC voltage: $\pm 20V$ DCConstruction/Installation/WiiringGeneral purposePower supply90 - 20VAC / 24 VDCCaseCase materialMS powder coated with ABS moulded bezelNoise Rejection Ratio Common Mode> 100 dB (50 Hz)Case colorDark GreyNormal Mode> 50 dB (50 Hz)Case colorApprox. 1.2 kg or less for single channel Applicable standardMS powder coated with ABS moulded hezelApplicable standardITS-90 or IPTS -68 Input to relay o/pSec.Dimensions (single channel)3.5mm(W) X 138.5mm(H)Resolution1 second or less, 63%(10 - 90%)Panel cut-out3.5mm(W) X 138.5mm(H)Mass.mm(W) X 138.5mm(H)Resolution1 second or less, 63%(10 - 90%)Tabet 1-200 to 1000 °C $\pm (0.1\% of FS \pm 1 count)$ Number of outputsOne per channelJ-200 to 1000 °C $\pm (0.1\% of FS \pm 1 count)$ Output Signal4 to 20 mA (Isolated)ThermocouplesE $e^{-200 to 10000 °C} = \pm (0.1\% of FS \pm 1 count)$ Output accuracy $\pm 0.25\%$ of spanS0 to 1768 °C $\pm (0.1\% of FS \pm 1 count)$ Output accuracy $\pm 0.25\%$ of spanS0 to 1768 °C $\pm (0.1\% of FS \pm 1 count)$ Output accuracy $\pm 0.25\%$ of spanS0 to 1768 °C $\pm (0.1\% of FS \pm 1 count)$ Output accuracy $\pm 0.25\%$ of spanS0 to 1768 °C $\pm (0.$		0	Bar Display						
Effect from allowable lead wire resistance: 0.6°C / 10 or lessPerform 1st Bottom Bar Display $1\%$ Under angeAllowable Input VoitageC / RTD: ± 10 V D C DC voitage: ± 20 V D CCaseGeneral purposePower supply90 - 270VAC / 24 VDCCaseMS powder coated with ABS moulded bezelNoise Rejection RatioCase colorCase colorDark GreyCommon Mode> 100 dB (50 Hz)Case colorApprox. 1.2 kg or less for single channel Approx. 1.7 kg or less for single channel prox. 1.7 kg or less for dual channelReference junction compensation error $\pm 2^{\circ}$ C (10 to 55°C)Dimensions (single channel)Approx. 1.7 kg or less for dual channel prox. 1.7 kg or less for dual channelApplicable standardITS-90 or IPTS -68Dimensions (dual channel)S3.5mm(HV) X138.5mm(H)Resonse timeIs econd or less, 63%(10 - 90%)Panel cut-out $33.5mm(W) X138.5mm(H)$ Resolution1 second or less, 63%(10 - 90%)Panel cut-out $40.00 \times 13.8(H)$ (all in mm)Number of outputsOne per channelImput TypeRase $-2000$ to 1000°C $\pm (0.1% of FS \pm 1 count)$ Number of outputsOne per channelImput Type $K = 2000 \text{ to 1030°C} \pm (0.1% of FS \pm 1 count)$ Output accuracy $40.25 \%$ of spanK $K = 2000 \text{ to 1030°C} \pm (0.1% of FS \pm 1 count)$ Output accuracy $40.25 \%$ of spanKK $00 \text{ to 1768°C} \pm (0.1\% of FS \pm 1 count)$ Output accuracy $40.25 \%$ of spanKK $00 \text{ to 1768°C} \pm (0.1\% of FS \pm 1 count)$ Output accuracy $40.25 \%$ of span </td <td>Allowable leadwire resistance</td> <td>15 / wire or less</td> <td></td> <td></td> <td></td> <td colspan="3"></td>	Allowable leadwire resistance	15 / wire or less							
Allowable Input Voltage    TC / RTD: ± 10V DC    Construction/Installation/Wiiring      Power supply    90 - 270VAC / 24 VDC    Case    General purpose      Noise Rejection Ratio    Case color    MS powder coated with ABS moulded bezel      Normal Mode    > 100 dB (50 Hz)    Case color    Dark Grey      Normal Mode    > 50 dB (50 Hz)    Weight    Approx. 1.2 kg or less for single channel      Applicable standard    TS-90 or IPTS -68    Dimensions (single channel)    36(W) x 144(H) x 245(D) (all in mm)      Applicable standard    TS-90 or IPTS -68    Dimensions (dual channel)    72(W) x 144(H) x 245(D) (all in mm)      Response time    Dimensions (dual channel)    72(W) x 144(H) x 245(D) (all in mm)    Panel cut-out    33.5mm(W) X 138.5mm(H)      Resolution    14½ bits    TABLE 1    Table 1    Table 1    Table 1      Vurbur of outputs    One per channel    J< -200 to 1000 °C		Effect from allowable lead wire				ar range			
Andwable injuit voltage    IC / ILD ± 100 DC    Case    General purpose      DC voltage: ±20V DC    Case    General purpose      Noise Rejection Ratio    Case color    Dark Grey      Common Mode    > 100 dB (50 Hz)    Keight    Approx. 1.2 kg or less for single channel      Normal Mode    > 50 dB (50 Hz)    Weight    Approx. 1.2 kg or less for single channel      Applicable standard    ITS-90 or IPTS -68    Dimensions (single channel)    36(W) x 144(H) x 245(D) (all in mm)      Applicable standard    ITS-90 or IPTS -68    Dimensions (dual channel)    72(W) x 144(H) x 245(D) (all in mm)      Response time    Dimensions (dual channel)    72(W) x 144(H) x 245(D) (all in mm)    Panel cut-out    33.5mm(W) X 138.5mm(H)      Resolution    14½ bits    TABLE 1    68(W) x 138(H) (all in mm)      Retransmission Output    14½ bits    Thermocouples    E    -200 to 1000 °C    ± (0.1% of FS ± 1 count)      Number of outputs    One per channel    J    -200 to 1372 °C    ± (0.1% of FS ± 1 count)      Output Signal    4 to 20 mA (Isolated)    T    -200 to 178 of FS ± 1 count)    J    -200 to 178 of FS ± 1 count)      Output accuracy    ± 0.25 % of span    S						Under range			
Power supply    90 - 270VAC / 24 VDC    Case material    MS powder coated with ABS moulded bezel      Noise Rejection Ratio    Case color    Dark Grey      Common Mode    > 50 dB (50 Hz)    Case color    Dark Grey      Reference junction compensation error    ± 2 °C (10 to 55°C)    Dimensions (single channel)    36(W) × 144(H) × 245(D) (all in mm)      Applicable standard    ITS-90 or IPTS -68    Dimensions (dual channel)    35.mm(W) X 138.5mm(H)      Response time    Dimensions (dual channel)    72(W) × 144(H) × 245(D) (all in mm)    Panel cut-out      Input to relay o/p    < 5 Sec.	Allowable Input Voltage				•	Conoral nurnoco			
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Normal Mode> 50 dB (50 Hz)WeightApprox. 1.2 kg or less for single channelReference junction compensation error $\pm 2 ^{\circ}$ C (10 to 55 °C)Dimensions (single channel) $36(W) \times 144(H) \times 245(D)$ (all in mm)Applicable standardITS-90 or IPTS -68Dimensions (single channel) $36(W) \times 144(H) \times 245(D)$ (all in mm)Response timeInput to relay o/p $< 5$ Sec.Dimensions (dual channel) $72(W) \times 144(H) \times 245(D)$ (all in mm)Input to relay o/p $< 5$ Sec.Dimensions (dual channel) $72(W) \times 144(H) \times 245(D)$ (all in mm)Resolution $14\frac{1}{2}$ bitsDimensions (dual channel) $72(W) \times 144(H) \times 245(D)$ (all in mm)Avaluation $14\frac{1}{2}$ bitsDimensions (dual channel) $72(W) \times 144(H) \times 245(D)$ (all in mm)Retransmission Output $14\frac{1}{2}$ bitsDimensions (dual channel) $72(W) \times 144(H) \times 245(D)$ (all in mm)Number of outputs $14\frac{1}{2}$ bitsDimensions (dual channel) $72(W) \times 144(H) \times 245(D)$ (all in mm)Number of outputs $14\frac{1}{2}$ bitsDimensions (dual channel) $72(W) \times 144(H) \times 245(D)$ (all in mm)Number of outputsOne per channel $K$ $200 to 1000 ^{\circ}C$ $\pm (0.1\% \text{ of } S \pm 1 \text{ count})$ Number of outputsOne per channel $K$ $-200 to 1000 ^{\circ}C$ $\pm (0.1\% \text{ of } FS \pm 1 \text{ count})$ Output Signal4 to 20 mA (Isolated)T $-200 to 1000 ^{\circ}C$ $\pm (0.1\% \text{ of } FS \pm 1 \text{ count})$ Output accuracy $\pm 0.25\%$ of spanS0 to 1768 ^{\circ}C $\pm (0.1\% \text{ of } FS \pm 1 \text{ count})$ Output Regulation0.01\% for fu	Noise Rejection Ratio		Case color		Dark	Dark Grey			
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Response time Input to relay o/p Input to Analog o/p72(W) × 144(H) × 245(D) (all in mm) Panel cut-outResolution1 second or less, 63%(10 - 90%)Panel cut-out68(W) × 138(H) (all in mm)Resolution14½ bitsTABLE 124V DC Loop Power Supply for sensor24 VDC ± 5% @ 100 mAInput TypeRangeMeasurement AccuracyRetransmission OutputOne per channelJ-200 to 1000 °C± (0.1% of FS ± 1 count)Number of outputsOne per channelK-200 to 1372 °C± (0.1% of FS ± 1 count)Output Signal4 to 20 mA (Isolated)T-200 to 1372 °C± (0.1% of FS ± 1 count)On-Load resistanceB450° to 1820 °C± (0.1% of FS ± 1 count)For Current 0/P500 or LessR0 to 1768 °C± (0.1% of FS ± 1 count)Output accuracy± 0.25 % of spanS0 to 1768 °C± (0.1% of FS ± 1 count)Output Regulation0.01% for full load changeRTDPt-100-199.9 to 850.0 °C± (0.1% of FS ± 1 count)Reactivition12 bito12 bitoRTDPt-100-199.9 to 9999± (0.1% of FS ± 1 count)	Applicable standard	ITS-90 or IPTS -68	( <b>•</b> )			, , , , , , ,			
Input to relay o/p Input to Analog o/p< 5 Sec.Panel cut-out $68(W) \times 138(H)$ (all in mm)Resolution14½ bits14½ bits <b>TABLE 1</b> 24V DC Loop Power Supply for sensor24 VDC $\pm$ 5% @ 100 mAInput TypeRangeMeasurement AccuracyRetransmission Output0ne per channelJ-200 to 1000 °C $\pm$ (0.1% of FS $\pm$ 1 count)Number of outputsOne per channelK-200 to 1372 °C $\pm$ (0.1% of FS $\pm$ 1 count)Output Signal4 to 20 mA (Isolated)T-200 to 1372 °C $\pm$ (0.1% of FS $\pm$ 1 count)On-Load resistanceB450° to 1820 °C $\pm$ (0.1% of FS $\pm$ 1 count)For Current 0/P500 or LessR0 to 1768 °C $\pm$ (0.1% of FS $\pm$ 1 count)Output Regulation0.01% for full load changeRTDPt-100-199.9 to 850.0 °C $\pm$ (0.1% of FS $\pm$ 1 count)Linear0/1-5V-1999 to 9999 $\pm$ (0.1% of FS $\pm$ 1 count)	Response time		Dimensions (du	ual channel)		72(W) x 144(H) x 245(D) (all in mm)			
Input to Analog o/p1 second or less, $63\%(10 - 90\%)$ Resolution $14\%$ bits24V DC Loop Power Supply for sensor24 VDC $\pm 5\%$ @ 100 mAInput TypeRangeMeasurement AccuracyRetransmission OutputJ-200 to 1000 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Number of outputsOne per channelK-200 to 1200 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output Signal4 to 20 mA (Isolated)T-200 to 1372 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ On-Load resistanceB $450^\circ$ to 1820 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ For Current 0/P500 or LessR0 to 1768 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output Regulation0.01\% for full load changeRTDPt-100-199.9 to 850.0 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ BAssociationRTDPt-100-199.9 to 850.0 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$	Input to relay o/p	< 5 Sec.	,		· ·				
Input TypeRangeMeasurement Accuracy24V DC Loop Power Supply for sensor24 VDC $\pm$ 5% @ 100 mAInput TypeRangeMeasurement AccuracyRetransmission OutputThermocouplesE-200 to 1000 °C $\pm$ (0.1% of FS $\pm$ 1 count)Number of outputsOne per channelJ-200 to 1200 °C $\pm$ (0.1% of FS $\pm$ 1 count)Output Signal4 to 20 mA (Isolated)T-200 to 1372 °C $\pm$ (0.1% of FS $\pm$ 1 count)On-Load resistanceB450° to 1820 °C $\pm$ (0.1% of FS $\pm$ 1 count)For Current 0/P500 or LessR0 to 1768 °C $\pm$ (0.1% of FS $\pm$ 1 count)Output Regulation0.01% for full load changeRTDPt-100-199.9 to 850.0 °C $\pm$ (0.1% of FS $\pm$ 1 count)Linear0/1-5V-1999 to 9999 $\pm$ (0.1% of FS $\pm$ 1 count)	Input to Analog o/p	1 second or less, 63%(10 - 90%)							
PetronDurphe to the duppy for sensor $24  VBC \pm 3.6  \mathbb{C}$ for hirdThermocouplesE-200 to 1000 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Retransmission OutputOne per channelJ-200 to 1200 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Number of outputsOne per channelK-200 to 1372 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output Signal4 to 20 mA (Isolated)T-200 to 400 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ On-Load resistanceB450° to 1820 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ For Current 0/P500 or LessR0 to 1768 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output accuracy $\pm 0.25\%$ of spanS0 to 1768 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output Regulation0.01\% for full load changeRTDPt-100-199.9 to 850.0 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Deschuiring12 bitsDifferenceRTDPt-100-199.9 to 9999 $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$	Resolution	14½ bits			_				
Hetransmission outputJ-200 to 1200 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Number of outputsOne per channelK-200 to 1200 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output Signal4 to 20 mA (Isolated)T-200 to 400 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ On-Load resistanceB450° to 1820 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ For Current O/P500 or LessR0 to 1768 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output accuracy $\pm 0.25\%$ of spanS0 to 1768 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output Regulation0.01\% for full load changeRTDPt-100-199.9 to 850.0 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Parcelution12 bitc12 bitc12 bitc12 bitc-1999 to 9999 $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$	24V DC Loop Power Supply for sensor	24 VDC ± 5% @ 100 mA		-	-				
Number of outputsOne per channelK-200 to $1372 \degree C$ $\pm (0.1\% \circ fFS \pm 1 \circ count)$ Output Signal4 to 20 mA (Isolated)T-200 to $1372 \degree C$ $\pm (0.1\% \circ fFS \pm 1 \circ count)$ On-Load resistanceB $450\degree to 1820 \degree C$ $\pm (0.1\% \circ fFS \pm 1 \circ count)$ For Current O/P500 or LessR0 to $1768 \degree C$ $\pm (0.1\% \circ fFS \pm 1 \circ count)$ Output accuracy $\pm 0.25\% \circ f span$ S0 to $1768 \degree C$ $\pm (0.1\% \circ fFS \pm 1 \circ count)$ Output Regulation0.01\% for full load changeRTDPt-100-199.9 to 850.0 \degree C $\pm (0.1\% \circ fFS \pm 1 \circ count)$ Parcelution12 bitcLinear0/1-5V-1999 to 9999 $\pm (0.1\% \circ fFS \pm 1 \circ count)$	Retransmission Output		mermocouples			( )			
Output Signal      4 to 20 mA (Isolated)      T      -200 to 400 °C $\pm$ (0.1% of FS $\pm$ 1 count)        On-Load resistance      B      450° to 1820 °C $\pm$ (0.1% of FS $\pm$ 1 count)        For Current 0/P      500 or Less      R      0 to 1768 °C $\pm$ (0.1% of FS $\pm$ 1 count)        Output accuracy $\pm$ 0.25 % of span      S      0 to 1768 °C $\pm$ (0.1% of FS $\pm$ 1 count)        Output Regulation      0.01% for full load change      RTD      Pt-100      -199.9 to 850.0 °C $\pm$ (0.1% of FS $\pm$ 1 count)        Parcelution      12 bitc      Linear      0/1-5V      -1999 to 9999 $\pm$ (0.1% of FS $\pm$ 1 count)	Number of outputs	One per channel				· · · · · · · · · · · · · · · · · · ·			
For Current 0/P500 or LessR0 to $1768 \degree C$ $\pm (0.1\% or FS \pm 1 count)$ Output accuracy $\pm 0.25\%$ of spanS0 to $1768 \degree C$ $\pm (0.1\% or FS \pm 1 count)$ Output Regulation0.01% for full load changeRTDPt-100-199.9 to $850.0 \degree C$ $\pm (0.1\% or FS \pm 1 count)$ Paragluign12 bitsLinear0/1-5V-1999 to 9999 $\pm (0.1\% or FS \pm 1 count)$	Output Signal	4 to 20 mA (Isolated)				· · · · · · · · · · · · · · · · · · ·			
Output accuracy $\pm 0.25\%$ of spanS0 to 1768 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Output Regulation0.01\% for full load changeRTDPt-100-199.9 to 850.0 °C $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$ Paraclution12 bitsLinear0/1-5V-1999 to 9999 $\pm (0.1\% \text{ of FS} \pm 1 \text{ count})$	On-Load resistance			В	450° to 1820 °C	$\pm$ (0.1% of FS $\pm$ 1 count)			
Output accuracy $\pm$ 0.25 % of spanRTDPt-100-199.9 to 850.0 °C $\pm$ (0.1% of FS $\pm$ 1 count)Output Regulation0.01% for full load changeLinear0/1-5V-1999 to 9999 $\pm$ (0.1% of FS $\pm$ 1 count)Parallelition12 bits	For Current O/P	500 or Less				· · · · · · · · · · · · · · · · · · ·			
Cutput Regulation $0.01\%$ for full load change Linear $0/1-5V$ -1999 to 9999 $\pm (0.1\%$ of FS $\pm 1$ count)	Output accuracy	± 0.25 % of span				· · · · · · · · · · · · · · · · · · ·			
Pacelution 12 bits Linear 0/1-5V -1999 to 9999 ± (0.1% of F5 ± 1 Count)	Output Regulation	0.01% for full load change				( /			
		12 bits	Linear	-1 -		( /			

## **ORDERING CODE**

RS 485(Modbus)

Serial communication

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Model			No	No. of Input Type		Aux Power Supply		1 Display	CH2 Dis	play		Mounting		Auxiliary o/p	
40005	Х		X		XX		XX		XX		XX		Х	Х	Х
	S	One	1	E	U1	90-270 VAC		PV	Bar		P0	Panel	Relay	Rx	RS485
	D	Two	2	J	A3	24VDC	RR	Red	Red	RR	W1	Wall-IP55	N	Ν	N
			3	К			RG	Red	Green	RG			N	Ν	Y
			4	Т	]		GR	Green	Red	GR			N	Y	N
			5	В	1		GG	Green	Green	GG			N	Y	Y
			6	R	]								Y	Ν	N
			7	S									Y	Ν	Y
			9	Pt-100, 3W									Y	Y	N
			С	4-20mA									Y	Y	Y
			D	0-20mA											
			Ε	1-5VDC											
			F	0-5VDC	x	- Specify from table	Y - Ye	es   N - No	Rx - Retransr	nission					

All specifications are subject to change without notice due technology reasons. Doc.ref.CB-2/4005/R2/0110