



## Indicatore digitale di tensione continua 4 moduli

Misura di tensione continua unidirezionale  
Ingresso diretto selezionabile 100 – 500V  
Visualizzazione diretta  
Versione con 2 allarmi programmabili

## Direct voltage digital meter 4 module

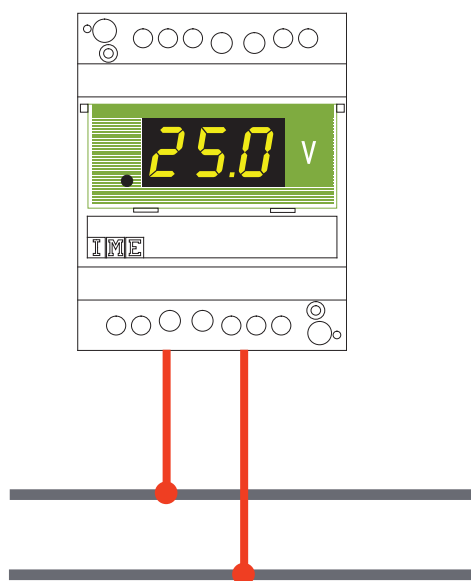
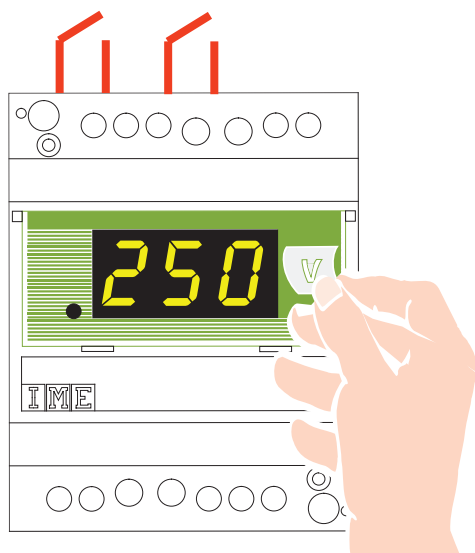
Unidirectional direct voltage measurements  
Selectable direct input 100 – 500V  
Direct display  
2 programmables alarms version

**DGMN**



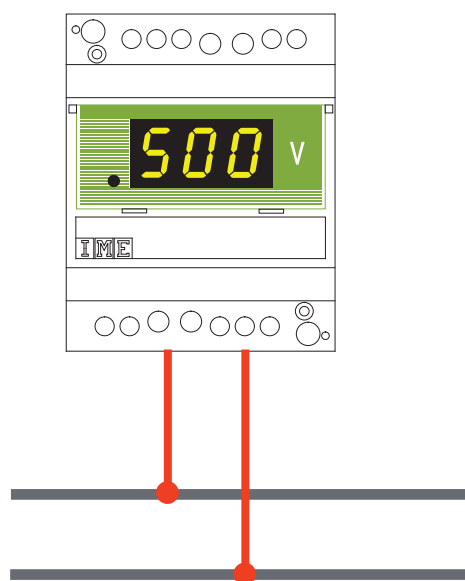
### Allarmi

### Alarms



**Misura di Tensione Un 100V**  
**Voltage measurement Un 100V**

**oppure**  
**or**



**Misura di Tensione Un 500V**  
**Voltage measurement Un 500V**

| CODICE DI ORDINAZIONE<br>ORDERING CODE | AL. AUSILIARIA<br>AUX. SUPPLY |            | ALLARMI<br>ALARMS | INGRESSO<br>INPUT |
|----------------------------------------|-------------------------------|------------|-------------------|-------------------|
|                                        | ca / ac                       | cc / dc    |                   |                   |
| DGMN01N6                               | 24V                           | -          | -                 | 100-500V          |
| DGMN03N6                               | 115V                          | -          |                   |                   |
| DGMN06N6                               | 230V                          | -          |                   |                   |
| DGMN07N6                               | 240V                          | -          |                   |                   |
| DGMN0HN6                               | 48V                           | 20...150V  |                   |                   |
| DGMN0LN6                               | -                             | 150...250V | 2                 |                   |
| DGMN21N6                               | 24V                           | -          |                   |                   |
| DGMN23N6                               | 115V                          | -          |                   |                   |
| DGMN26N6                               | 230V                          | -          |                   |                   |
| DGMN27N6                               | 240V                          | -          |                   |                   |
| DGMN2HN6                               | 48V                           | 20...150V  |                   |                   |
| DGMN2LN6                               | -                             | 150...250V |                   |                   |

| VISUALIZZAZIONE                                                   |
|-------------------------------------------------------------------|
| Tipo display: LED verdi, 7 segmenti                               |
| Altezza cifre: 14mm                                               |
| N° punti visualizzazione: 1.000 (3 cifre)                         |
| Indicazione massima: 999                                          |
| Unità ingegneristica: V (targa adesiva)                           |
| Punto decimale: automatico (vedi tabella)                         |
| Indicazione fuoriscala: accensione contemporanea 3 punti decimali |
| Fuoriscala: ingresso > 1,2Un                                      |
| Risoluzione: vedi tabella                                         |
| Precisione (riferita al fondo scala): ± 1%+1 digit                |
| Aggiornamento lettura: 2,9s                                       |

| INGRESSO                                                 |
|----------------------------------------------------------|
| Inserzione: diretta                                      |
| Tensione nominale Un: 100 – 500V                         |
| Campo di misura: 0,02...1,2Un                            |
| Impedenza di ingresso: ≥ 200kΩ(Un 100V) - ≥ 1MΩ(Un 500V) |
| Sovraccarico permanente: 1,2Un                           |

| PROGRAMMAZIONE                                                                  |
|---------------------------------------------------------------------------------|
| Programmazione parametri: pulsanti accessibili dal frontale (diametro foro 3mm) |
| Memorizzazione parametri di configurazione: memoria permanente (senza batteria) |

| PARAMETRI PROGRAMMABILI                                      |
|--------------------------------------------------------------|
| PORTATA - VISUALIZZAZIONE: vedi tabella                      |
| ALLARMI (DGMN2): tipo, soglia. isteresi, ritardo, stato relè |

| Portata Range                 | 100V  | 500V |
|-------------------------------|-------|------|
| Visualizzazione Display       | 99,9V | 500V |
| Visualizzazione Display + 20% | 120V  | 600V |

| ALLARMI (DGMN2)                                          |
|----------------------------------------------------------|
| Allarmi programmabili: 2                                 |
| Tipo: programmabile minima e/o massima                   |
| Soglia: programmabile 0...120% portata selezionata       |
| Isteresi: programmabile 0...soglia selezionata           |
| Ritardo: programmabile 1...60s                           |
| Precisione ritardo: ±10%                                 |
| Tempo di ripristino: ≤ 500ms                             |
| Uscita: 2 relè con contatto SPDT, libero da potenziale   |
| Stato relè: programmabile norm. eccitato o diseccitato   |
| Portata contatti: 5A 250Vca – 0,5A 100Vcc                |
| Precisione (riferita al fondo scala): ±1,5%              |
| Segnalazione intervento allarmi: lampeggio dicitura “AL” |

| DISPLAY                                                         |
|-----------------------------------------------------------------|
| Tipe of display: 7 segments, green LED's                        |
| Digit height: 14mm                                              |
| N° of display points: 1.000 (3 digit)                           |
| Maximum display: 999                                            |
| Engineering unit: V (adhesive label)                            |
| Decimal point: automatic (see table)                            |
| Overrange indication: simultaneous lighting of 3 decimal points |
| Overrange: input > 1,2Un                                        |
| Resolution: see table                                           |
| Accuracy (referred to full scale): ± 1%+1 digit                 |
| Display update: 2,9s                                            |

| INPUT                                              |
|----------------------------------------------------|
| Connection: direct                                 |
| Rated voltage Un: 100 – 500V                       |
| Measuring range: 0,02...1,2Un                      |
| Input impedance: ≥ 200kΩ(Un 100V) - ≥ 1MΩ(Un 500V) |
| Continuous overload: 1,2Un                         |

| PROGRAMMING                                                          |
|----------------------------------------------------------------------|
| Parameters programming: front frame push buttons (hole diameter 3mm) |
| Hold of configuration parameters: non volatile memory (no battery)   |

| PROGRAMMABLE PARAMETERS                                         |
|-----------------------------------------------------------------|
| RANGE - DISPLAY: see table                                      |
| ALARMS (DGMN2): type, set-point, hysteresis, delay, relay state |

| ALARMS (DGMN2)                                            |
|-----------------------------------------------------------|
| Programmables alarms: 2                                   |
| Type: programmable min. and/or max.                       |
| Set-point: programmable 0...120% selected range           |
| Hysteresis: programmable 0...set-point                    |
| Delay: programmable 1...60s                               |
| Delay accuracy: ±10%                                      |
| Reset time: ≤ 500ms                                       |
| Output: 2 relays with SPDT contacts, potential free       |
| Relay state: programmable norm. energised or de-energised |
| Contacts range: 5A 250Vac – 0,5A 100Vdc                   |
| Accuracy (referred to full scale): ±1,5%                  |
| Alarms intervention display: blinking message “AL”        |

## ALIMENTAZIONE AUSILIARIA

Valore nominale  $U_{aux}$  ca: 24 – 48 – 115 – 230 – 240V

Variazione ammessa:  $\pm 10\%$   $U_{aux}$  ca – 40...60V ( $U_{aux}$  48V)

Frequenza nominale:  $\pm 50\%$ Hz

Frequenza di funzionamento: 47...63Hz

Autoconsumo:  $\leq 3,5$ VA

Valore nominale  $U_{aux}$  cc: 20...150Vcc – 150...250Vcc

Autoconsumo:  $\leq 2,5$ W

Protezione contro l'inversione di polarità

## ISOLAMENTO

(EN/IEC 61010-1)

Categoria di installazione: III

Grado di inquinamento: 2

Prova di tensione alternata 2,5kV valore efficace 50Hz/1 min

Circuiti considerati: misura, alimentazione, uscita relè (DGMN2)

Prova di tensione alternata 2,5kV valore efficace 50Hz/1 min

Circuiti considerati: tutti i circuiti e massa

Prova di tensione a impulso 5kV 1,2/50 $\mu$ s 0,5J

Circuiti considerati: misura, alimentazione, uscita relè (DGMN2)

## COMPATIBILITA' Elettromagnetica

Prove di emissione in accordo con EN/IEC 61326-1

Prove di immunità in accordo con EN/IEC 61326-1

## CONDIZIONI AMBIENTALI

Temperatura di riferimento: 23°C  $\pm 1^\circ$ C

Temperatura di impiego: -5...55°C

Variazione indice di classe:  $\pm 0,03\%$ /°C

Campo limite per l'immagazzinamento e trasporto: -40...70°C

Adatto all'utilizzo in clima tropicale

Massima potenza dissipata<sup>1</sup>:  $\leq 3,5$ W

<sup>1</sup>Per il dimensionamento termico dei quadri

## CUSTODIA

Custodia: 4 moduli DIN 43880

Conessioni: morsetti a vite

Montaggio: a incastro su profilato 35mm

Tipo profilato: a cappello TH35-15 (EN/IEC 60715)

Materiale custodia: policarbonato autoestinguente

Grado di protezione (EN/IEC 60529): IP50 frontale, IP20 morsetti

Peso: 270 grammi

## AUXILIARY SUPPLY

Rated value  $U_{aux}$  ac: 24 – 48 – 115 – 230 – 240V

Tolerance:  $\pm 10\%$   $U_{aux}$  ca – 40...60V ( $U_{aux}$  48V)

Rated frequency:  $\pm 50\%$ Hz

Working frequency: 47...63Hz

Rated burden:  $\leq 3,5$ VA

Rated value  $U_{aux}$  dc: 20...150Vdc – 150...250Vdc

Rated burden:  $\leq 2,5$ W

Protected against incorrect polarity

## INSULATION

(EN/IEC 61010-1)

Installation category: III

Pollution degree: 2

A.C. voltage test 2,5kV r.m.s. 50Hz/1 min

Considered circuits: measure, supply, relays output (DGMN2)

A.C. voltage test 2,5kV r.m.s. 50Hz/1 min

Considered circuits: all circuits and earth

Impulse voltage test 5kV 1,2/50 $\mu$ s 0,5J

Considered circuits: measure, supply, relays output (DGMN2)

## ELECTROMAGNETIC COMPATIBILITY

Emission tests according to EN/IEC 61326-1

Immunity tests according to EN/IEC 61326-1

## ENVIRONMENTAL CONDITIONS

Reference temperature: 23°C  $\pm 1^\circ$ C

Specified operating range: -5...55°C

Variation to the class index:  $\pm 0,03\%$ /°C

Limit range for storage and transport: -40...70°C

Suitable for tropical climates

Max. power dissipation<sup>1</sup>:  $\leq 3,5$ W

<sup>1</sup>For switchboard thermal calculation

## HOUSING

Housing: 4 module DIN 43880

Connections: screw terminals

Mounting: snap-on 35mm rail

Rail type: top hat TH35-15 (EN/IEC 60715)

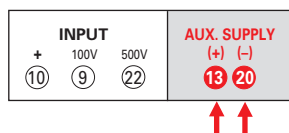
Housing material: self-extinguishing polycarbonate

Protection degree (EN/IEC 60529): IP50 front frame, IP20 terminals

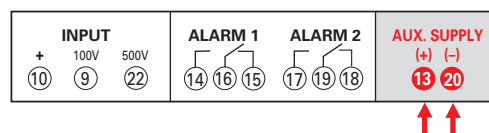
Weight: 270 grams

## SCHEMI D'INSERZIONE WIRING DIAGRAMS

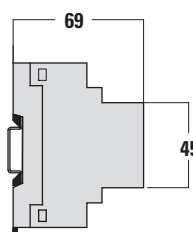
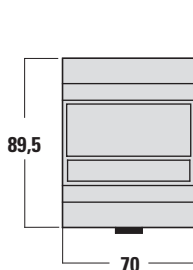
S 305/147



S 305/149



## DIMENSIONI DIMENSIONS





**Indicateur numérique  
de tension continue  
4 modules**

**Direct voltage  
digital meter  
4 module**

**DGM D4**

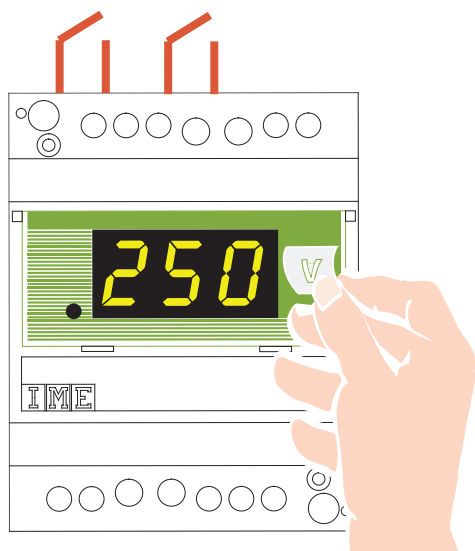
Mesure de tension continue unidirectionnelle  
Entrée directe sélectionnable 100 – 500V  
Affichage direct  
Version avec 2 alarmes programmables

Unidirectional direct voltage measurements  
Selectable direct input 100 – 500V  
Direct display  
2 programmable alarms version

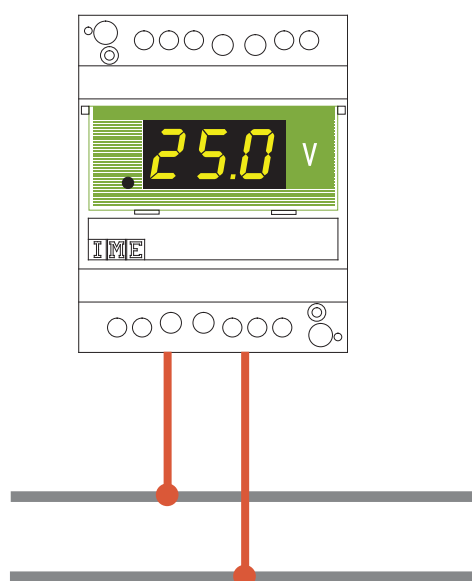


**Alarmes**

**Alarms**

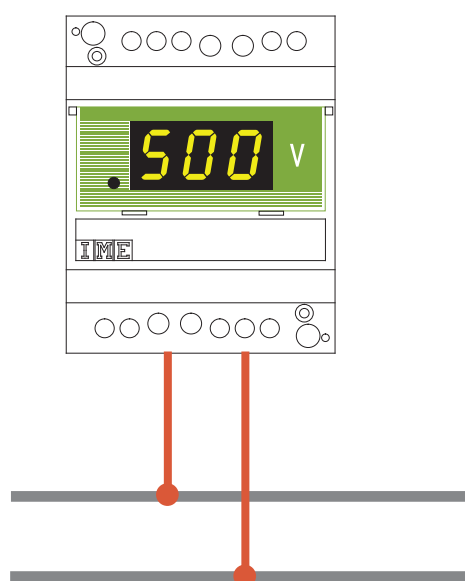


100...500



**Mesure de tension Un 100V**  
**Voltage measurement Un 100V**

**ou**  
**or**



**Mesure de tension Un 500V**  
**Voltage measurement Un 500V**

| REFERENCE<br>ORDERING CODE                                                        | ALIMENTATION AUXILIAIRE<br>AUX. SUPPLY |            | ALARMS<br>ALARMS | ENTREE<br>INPUT |
|-----------------------------------------------------------------------------------|----------------------------------------|------------|------------------|-----------------|
|                                                                                   | ca / ac                                | cc / dc    |                  |                 |
|  | 24V                                    | -          | -                | 100-500V        |
|  | 115V                                   | -          |                  |                 |
|  | 230V                                   | -          |                  |                 |
|  | 240V                                   | -          |                  |                 |
|  | 48V                                    | 20...150V  |                  |                 |
|  | -                                      | 150...250V | 2                |                 |
|  | 24V                                    | -          |                  |                 |
|  | 115V                                   | -          |                  |                 |
|  | 230V                                   | -          |                  |                 |
|  | 240V                                   | -          |                  |                 |
|  | 48V                                    | 20...150V  |                  |                 |
|  | -                                      | 150...250V |                  |                 |

## AFFICHAGE

Type d'afficheur: LED rouges, 7 segments

Hauteur des chiffres: 14mm

N° de points d'affichage: 1.000 (3 chiffres)

Indication maximum: 999

Unité de grandeur: V (étiquette adhésive)

Point décimal: automatique (voir tableau)

Indication du dépassement: allumage simultané des 3 points décimaux

Dépassement: entrée > 1,2Un

Résolution: voir tableau

Précision (par rapport au fond d'échelle):  $\pm 1\%+1$  digit

Echantillonnage de l'affichage: 2,9s

## ENTREE

Raccordement: direct

Tension nominale Un: 100 – 500V

Etendue de mesure: 0,02...1,2Un

Impédance d'entrée:  $\geq 200k\Omega$  (Un 100V) -  $\geq 1M\Omega$  (Un 500V)

Surcharge permanente: 1,2Un

## PROGRAMMATION

Paramètres programmables: touches accessibles en façade (dia. du trou 3mm)

Mémorisation des paramètres de configuration: mémoire permanente (sans batterie)

## PARAMETRES PROGRAMMABLES

CALIBRES - AFFICHAGE: voir tableau

ALARMES : type, seuil, hystérésis, délai, état du relais

| Calibres Range          | 100V  | 500V |
|-------------------------|-------|------|
| Affichage Display       | 99,9V | 500V |
| Affichage Display + 20% | 120V  | 600V |

## ALARMES

Alarmes programmables: 2

Type: programmable min. et/ou max.

Seuil: programmable 0...120% calibre sélectionnable

Hystérésis: programmable 0...seuil sélectionné

Délai: programmable 1...60s

Précision délai:  $\pm 10\%$

Temps de réponse:  $\leq 500ms$

Sortie: 2 relais avec contact SPDT, libre de potentiel

Etat du relais: programmable norm. excité ou désexcité

Pouvoir de coupure: 5A 250Vca – 0,5A 100Vcc

Précision (référée au fond d'échelle):  $\pm 1,5\%$

Signalisation intervention alarme: message clignotant "AL"

## DISPLAY

Type of display: 7 segments, green LED's

Digit height: 14mm

N° of display points: 1.000 (3 digit)

Maximum display: 999

Engineering unit: V (adhesive label)

Decimal point: automatic (see table)

Overrange indication: simultaneous lighting of 3 decimal points

Overrange: input > 1,2Un

Resolution: see table

Accuracy (referred to full scale):  $\pm 1\%+1$  digit

Display update: 2,9s

## INPUT

Connection: direct

Rated voltage Un: 100 – 500V

Measuring range: 0,02...1,2Un

Input impedance:  $\geq 200k\Omega$  (Un 100V) -  $\geq 1M\Omega$  (Un 500V)

Continuous overload: 1,2Un

## PROGRAMMING

Parameters programming: front frame push buttons (hole diameter 3mm)

Hold of configuration parameters: non volatile memory (no battery)

## PROGRAMMABLE PARAMETERS

RANGE - DISPLAY: see table

ALARMS (DGMN2): type, set-point, hysteresis, delay, relay state

## ALARMS (DGMN2)

Programmables alarms: 2

Type: programmable min. and/or max.

Set-point: programmable 0...120% selected range

Hysteresis: programmable 0...set-point

Delay: programmable 1...60s

Delay accuracy:  $\pm 10\%$

Reset time:  $\leq 500ms$

Output: 2 relays with SPDT contacts, potential free

Relay state: programmable norm. energised or de-energised

Contacts range: 5A 250Vac – 0,5A 100Vdc

Accuracy (referred to full scale):  $\pm 1,5\%$

Alarms intervention display: blinking message "AL"

## ALIMENTATION AUXILIAIRE

Valeur nominale **Uaux ca**: 24 – 48 – 115 – 230 – 240V

Variation admissible:  $\pm 10\%$  Uaux ca – 40...60V (Uaux 48V)

Fréquence nominale:  $\pm 50\%$ Hz

Fréquence de fonctionnement: 47...63Hz

Autoconsommation:  $\leq 3,5$ VA

Valeur nominale **Uaux cc**: 20...150Vcc – 150...250Vcc

Autoconsommation:  $\leq 2,5$ W

Protection contre l'inversion de polarité

## ISOLEMENT

(EN/IEC 61010-1)

Catégorie de l'installation: III

Degré de pollution: 2

Tension d'essai 2,5kV valeur efficace 50Hz/1 min

Circuits considérés: mesure, alimentation, sortie relais

Tension d'essai 2,5kV valeur efficace 50Hz/1 min

Circuits considérés: tous les circuits et la masse

Tension d'essai 5kV impulsions normalisées 1,2/50 $\mu$ s 0,5J

Circuits considérés: mesure, alimentation, sortie relais

## COMPATIBILITÉ ELECTROMAGNETIQUE

Test d'émission selon EN/IEC 61326-1

Test d'immunité selon EN/IEC 61326-1

## CONDITIONS D'UTILISATION

Température de référence: 23°C  $\pm 1^\circ$ C

Température limite d'utilisation: -5...55°C

Variation de l'indice de classe:  $\pm 0,03\%/^\circ$ C

Température de stockage et de transport: -40...70°C

Adapté pour l'utilisation en climat tropical

Puissance max. dissipée<sup>1</sup>:  $\leq 3,5$ W

<sup>1</sup>Pour le dimensionnement thermique du coffret

## BOITIER

Boîtier: 4 modules DIN43880

Raccordement : bornes à vis

Montage: rail 35mm

Type de profil: TH35-15 (EN/IEC 60715)

Matériau du boîtier: makrolon autoextinguible

Degré de protection (EN60529): IP50 (face avant), IP20 (bornes)

Poids: 270 grammes

## AUXILIARY SUPPLY

Rated value **Uaux ac**: 24 – 48 – 115 – 230 – 240V

Tolerance:  $\pm 10\%$  Uaux ca – 40...60V (Uaux 48V)

Rated frequency:  $\pm 50\%$ Hz

Working frequency: 47...63Hz

Rated burden:  $\leq 3,5$ VA

Rated value **Uaux dc**: 20...150Vdc – 150...250Vdc

Rated burden:  $\leq 2,5$ W

Protected against incorrect polarity

## INSULATION

(EN/IEC 61010-1)

Installation category: III

Pollution degree: 2

A.C. voltage test 2,5kV r.m.s. 50Hz/1 min

Considered circuits: measure, supply, relays output (DGMN2)

A.C. voltage test 2,5kV r.m.s. 50Hz/1 min

Considered circuits: all circuits and earth

Impulse voltage test 5kV 1,2/50 $\mu$ s 0,5J

Considered circuits: measure, supply, relays output (DGMN2)

## ELECTROMAGNETIC COMPATIBILITY

Emission tests according to EN/IEC 61326-1

Immunity tests according to EN/IEC 61326-1

## ENVIRONMENTAL CONDITIONS

Reference temperature: 23°C  $\pm 1^\circ$ C

Specified operating range: -5...55°C

Variation to the class index:  $\pm 0,03\%/^\circ$ C

Limit range for storage and transport: -40...70°C

Suitable for tropical climates

Max. power dissipation<sup>1</sup>:  $\leq 3,5$ W

<sup>1</sup>For switchboard thermal calculation

## HOUSING

Housing: 4 module DIN 43880

Connections: screw terminals

Mounting: snap-on 35mm rail

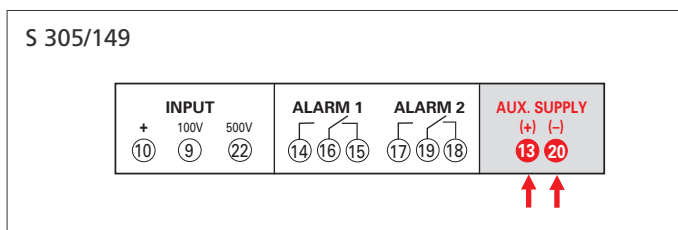
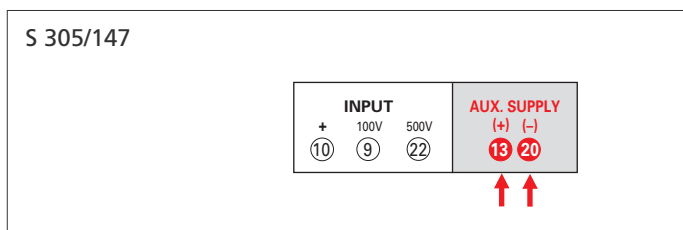
Rail type: top hat TH35-15 (EN/IEC 60715)

Housing material: self-extinguishing polycarbonate

Protection degree (EN/IEC 60529): IP50 front frame, IP20 terminals

Weight: 270 grams

## SCHEMAS DE RACCORDEMENT WIRING DIAGRAM



## DIMENSIONS DIMENSIONS

