



Indicatore digitale di tensione o corrente continua 96x96 mm

Direct voltage or current digital meter 96x96 mm

DGQ96P2k



Misura e visualizzazione di tensione o
corrente continua

Visualizzazione di qualsiasi grandezza
direttamente proporzionale alla tensione o
corrente di ingresso

13 portate d'ingresso $\pm 50\text{mV} \pm 60\text{mV} \pm 75\text{mV} \pm$
 $75\text{mV} \pm 100\text{mV} \pm 150\text{mV} \pm 1\text{V} \pm 5\text{V} \pm 10\text{V} \pm$
 $1\text{mA} \pm 5\text{mA} \pm 10\text{mA} \pm 20\text{mA} - 4\ldots 20\text{mA}$

Visualizzazione programmabile
nel campo -1999...1999

To measure and display direct current or
voltage

Display of any proportional quantity
directly proportional to input current or
voltage

13 input ranges $\pm 50\text{mV} \pm 60\text{mV} \pm 75\text{mV} \pm$
 $100\text{mV} \pm 150\text{mV} \pm 1\text{V} \pm 5\text{V} \pm 10\text{V} \pm 1\text{mA} \pm 5\text{mA}$
 $\pm 10\text{mA} \pm 20\text{mA} - 4\ldots 20\text{mA}$

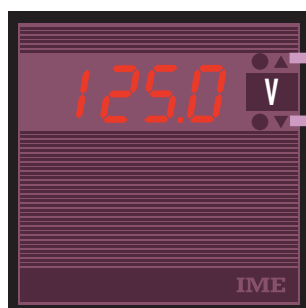
Programmable display value
-1999...1999

Misura Measure

50mV
60mV
75mV
100mV
150mV

1V
5V
10V

1mA
5mA
10mA
20mA
4...20mA



Programmazione Programming

Portata Range
Visualizzazione Display

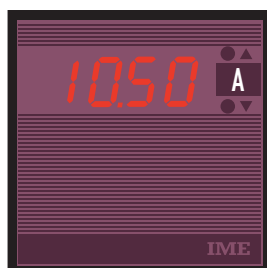


A	V	°C	%	W	Hz
kW	MW	kg	bar	var	kvar
Mvar	RPM	m/min	Giri/min	kg/cm²	m³/h

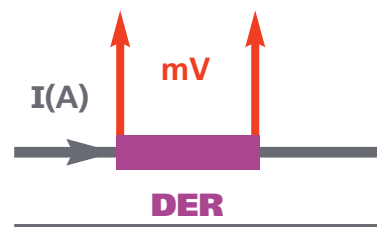
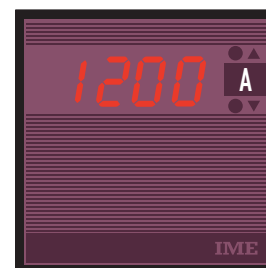
Tensione Diretta Direct Voltage



Corrente Diretta Direct Current



Corrente da shunt esterno Current by external shunt



CODICE DI ORDINAZIONE ORDERING CODE	INGRESSO INPUT	AL. AUSILIARIA AUX. SUPPLY	
		ca/ac	cc/dc
DG9P0MP1	± 50 - 60 - 75 - 100 - 150mV ± 1 - 5 - 10V ± 1 - 5 - 10 - 20mA 4...20mA	20...60V	20...150V
DG9P0NP1		80...270V	100...300V
ADGIP549	Accessorio protezione frontale IP54 / IP54 front frame protection kit		

VISUALIZZAZIONE

Tipo display: LED rossi, 7 segmenti
Altezza cifre: 14mm
N° punti visualizzazione: 2.000 (3½ cifre)
Indicazione massima: -1999...1999
Unità ingegneristica: personalizzabile dall'utente (targa adesiva)
Indicazione polarità: automatica
Indicazione fuorisca (visualizzazione > 1999): "----"
Indicazione fuorisca (visualizzazione inferiore al valore inizio scala): "___"
Indicazione polarità invertita¹: "___"
¹solo con configurazione ingresso unidirezionale
Aggiornamento visualizzazione: 3s
Aggiornamento misura: 1 lettura/secondo
Precisione (riferita al fondo scala): ± 1% + 1 digit

PROGRAMMAZIONE

Programmazione parametri: tastiera frontale, 2 tasti
Conservazione parametri di configurazione: memoria permanente (EEPROM) senza batteria
Accesso alla programmazione: combinazione di tasti

PARAMETRI PROGRAMMABILI

INGRESSO
Selezione grandezza ingresso: tensione (mV - V) oppure corrente (mA)
Portate tensione Un: 1 - 5 - 10V opp. 50 - 75 - 60 - 100 - 150mV
Portate corrente In: 1 - 5 - 10 - 20 - 4...20mA
Tipo ingresso: unidirezionale positivo, unidirezionale negativo, bidirezionale
Unidirezionale positivo: 0...+Un opp. 0...+In (es. 0...+10V / 0...+20mA / 0...+60mV)
Unidirezionale negativo: -Un...0 opp. -In...0 (es. -10...0V / -20...0mA / -60...0mV)
Bidirezionale: -Un...+Un opp. -In...+In (es. -10...+10V / -20...+20mA / -60...+60mV)
VISUALIZZAZIONE
Valore inizio e fondo scala: -1999...1999
Polarità inizio e fondo scala: - opp. +
Punto decimale (virgola): 1999. - 199.9 - 19.99 - 1.999

INGRESSO

Inserzione: diretta
Misura: tensione oppure corrente continua
Forma d'onda: continua
Tensione nominale Un: 50mV - 60mV - 75mV - 100mV - 150mV
Impedenza di ingresso: ≥ 40kΩ
Tensione nominale Un: 1V - 5V - 10V
Impedenza di ingresso: ≥ 300kΩ
Corrente nominale In: 1mA - 5mA
Caduta di tensione: ≤ 1V
Corrente nominale In: 10mA - 20mA - 4...20mA
Caduta di tensione: ≤ 200mV
Sovraccarico permanente: 1,2Un - 1,2In
Sovraccarico istantaneo: 2Un/5s - 2In/5s

DISPLAY

Type of display: 7 segments, red LED's
Digit height: 14mm
N° of display points: 2.000 (3½ digit)
Maximum display: -1999...1999
Engineering unit: user-customizable (adhesive label)
Polarity indication: automatic
Overrange indication (display > 1999): "----"
Out of scale indication (display lower than beginning of scale value): "___"
Reversed polarity indication¹: "___"
¹just with unidirectional input configuration
Display update: 3s
Measure update: 1 reading/s
Accuracy (referred to full scale): ± 1% + 1 digit

PROGRAMMING

Parameters programming: front keyboards, 2 keys
Hold of configuration parameters: EEPROM memory, non volatile, no battery
Programming access: keys combination

PROGRAMMABLE PARAMETERS

INPUT
Input quantity selection: voltage (mV - V) or current (mA)
Voltage ranges Un: 1 - 5 - 10V or 50 - 75 - 60 - 100 - 150mV
Current ranges In: 1 - 5 - 10 - 20 - 4...20mA
Type of input: unidirectional positive, unidirectional negative, bidirectional
Unidirectional positive: 0...+Un or 0...+In (ex.: 0...+10V / 0...+20mA / 0...+60mV)
Unidirectional negative: -Un...0 or -In...0 (ex.: -10...0V / -20...0mA / -60...0mV)
Bidirectional: -Un...+Un or -In...+In (ex.: -10...+10V / -20...+20mA / -60...+60mV)
DISPLAY
Beginning of scale and full scale value: -1999...1999
Beginning of scale and full scale polarity: - or +
Decimal point (comma): 1999. - 199.9 - 19.99 - 1.999

INPUT

Connection: direct
Measurement: direct current or voltage
Waveform: direct
Voltage rating Un: 50mV - 60mV - 75mV - 100mV - 150mV
Input impedance: ≥ 40kΩ
Voltage rating Un: 1V - 5V - 10V
Input impedance: ≥ 300kΩ
Current rating In: 1mA - 5mA
Voltage drop: ≤ 1V
Current rating In: 10mA - 20mA - 4...20mA
Voltage drop: ≤ 200mV
Continuous overload: 1,2Un - 1,2In
Instantaneous overload: 2Un/5s - 2In/5s

ALIMENTAZIONE AUSILIARIA

Valore nominale ca: 20...60V opp. 80...270V
Frequenza nominale: 50Hz
Frequenza di funzionamento: 47...63Hz
Autoconsumo: ≤ 3VA
Valore nominale cc: 20...150V opp. 100...300V
Autoconsumo: ≤ 3W
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: ingresso, alimentazione ausiliaria
Prova di tensione a impulso 4kV 1,2/50µs 0,5J
Circuiti considerati: ingresso, alimentazione ausiliaria
Prova di tensione alternata 4kV valore efficace 50Hz/1 min
Circuiti considerati: tutti i circuiti e massa

COMPATIBILITÀ 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 ± 1°C
Temperatura di impiego: -5...55°C
Temperatura di magazzino: -40...70°C
Adatto all'utilizzo in clima tropicale
Massima potenza dissipata¹: ≤ 3,6W
¹Per il dimensionamento termico dei quadri

CUSTODIA

Custodia: incasso (foratura pannello 92x92mm)
Frontale: 96x96mm (99x99mm con protezione IP54)
Profondità: 103mm
Connessione: faston 6,3x0,8mm
Materiale custodia: policarbonato autoestinguente
Grado di protezione (EN/IEC 60529): IP50 (frontale) IP20 (terminali)
Opzione: protezione frontale IP54 (con accessorio ADGIP549)
Peso: 320 grammi

UNITÀ INGEGNERISTICA

Etichette autoadesive, fornite con lo strumento

AUXILIARY SUPPLY

Rated value ac: 20...60V or 80...270V
Rated frequency: 50Hz
Working frequency: 47...63Hz
Rated burden: ≤ 3VA
Rated value dc: 20...150V or 100...300V
Rated burden: ≤ 3W
Protected against incorrect polarity

INSULATION (EN/IEC 61010-1)

Installation category: III
Pollution degree: 2
A.C. voltage test 2,5kV r.m.s. value 50Hz/1 min
Considered circuits: input, aux. supply
Impulse voltage test 4kV 1,2/50µs 0,5J
Considered circuits: input, aux. supply
A.C. voltage test 4kV r.m.s. value 50Hz/1 min
Considered circuits: all circuits and earth

ELECTROMAGNETIC COMPATIBILITY

Emission tests according to EN/IEC 61326-1
Immunity tests according to EN/IEC 61326-1

ENVIRONMENTAL CONDITIONS

Reference temperature: 23°C ± 1°C
Specified temperature range: -5...55°C
Limit temperature range for storage: -40...70°C
Suitable for tropical climates
Max. power dissipation¹: ≤ 3,6W
¹For switchboard thermal calculation

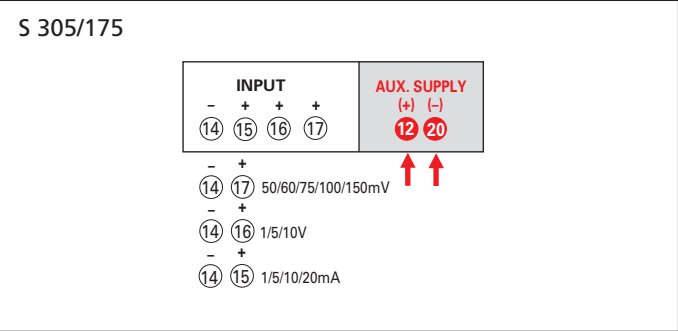
HOUSING

Housing: flush mounting (panel cutout 92x92mm)
Front frame: 96x96mm (99x99mm with IP54 protection)
Depth: 103mm
Connections: fast-on 6,3x0,8mm
Housing material: self-extinguishing polycarbonate
Protection degree (EN/IEC 60529): IP50 (front frame) IP20 (terminals)
Option: IP54 protection degree (with kit ADGIP549)
Weight: 320 grams

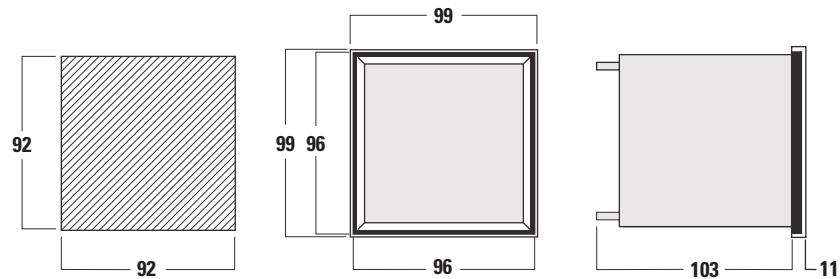
ENGINEERING UNIT

Adhesive label supplied with the meter

A	V	°C	%	W	Hz
kW	MW	kg	bar	var	kvar
Mvar	R.P.M.	m/min	Giri/min	kg/cm²	m³/h



DIMENSIONI DIMENSIONS





**Indicateur numérique
de tension ou courant
continu
96x96 mm**

**Direct voltage
or current
digital meter
96x96 mm**

DGQ96P2k



Mesure et affichage de tension ou
courant continu

Affichage de toute grandeur directement
proportionnelle à l'entrée courant
ou tension

13 calibres d'entrée $\pm 50\text{mV} \pm 60\text{mV} \pm 75\text{mV}$
 $\pm 100\text{mV} \pm 150\text{mV} \pm 1\text{V} \pm 5\text{V} \pm 10\text{V} \pm 1\text{mA} \pm$
 $5\text{mA} \pm 10\text{mA} \pm 20\text{mA} - 4\ldots 20\text{mA}$

Affichage programmable
valeur -1999...1999

To measure and display direct current or
voltage

Display of any proportional quantity
directly proportional to input current
or voltage

13 input ranges $\pm 50\text{mV} \pm 60\text{mV} \pm 75\text{mV} \pm$
 $100\text{mV} \pm 150\text{mV} \pm 1\text{V} \pm 5\text{V} \pm 10\text{V} \pm 1\text{mA} \pm 5\text{mA}$
 $\pm 10\text{mA} \pm 20\text{mA} - 4\ldots 20\text{mA}$

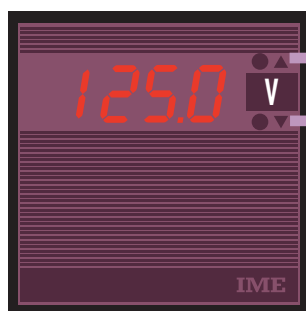
Programmable display value
-1999...1999

**Mesure
Measure**

50mV
60mV
75mV
100mV
150mV

1V
5V
10V

1mA
5mA
10mA
20mA
4...20mA



**Programmation
Programming**

Calibre Range
Affichage Display

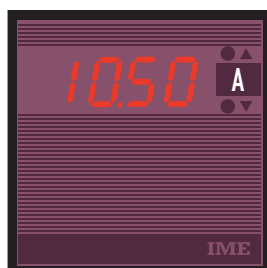


A	V	°C	%	W	Hz
kW	MW	kg	bar	var	kvar
Mvar	RPM	m/min	Giri/min	kg/cm²	m³/h

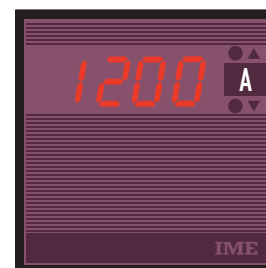
**Tension Directe
Direct Voltage**



**Courant Direct
Direct Current**



**Courant sur shunt externe
Current by external shunt**



REFERENCE ORDERING CODE	ENTREE INPUT	ALIM. AUX. AUX. SUPPLY	
		ca / ac	cc / dc
2010 1434	± 50 - 60 - 75 - 100 - 150mV ± 1 - 5 - 10V ± 1 - 5 - 10 - 20mA 4...20mA	20...60V	20...150V
2010 1435		80...270V	100...300V
7026 0212	Accessoire protection façade IP54 / IP54 front frame protection kit		

AFFICHAGE

Type d'affichage: LED rouge, 7 chiffres

Hauteur des chiffres: 14mm

N° de points d'affichage: 2.000 (3½ chiffres)

Indication maximum: -1999...1999

Unité de grandeur: personnalisable par l'utilisateur (étiquette adhésive)

Indication de la polarité: automatique

Indication dépassement (affichage > 1999): "----"

Indication dépassement (affichage inférieur à la valeur de début d'échelle):
"----"

Indication polarité inversée 1: "----"

1 uniquement avec une configuration unidirectionnelle

Mise à jour de l'affichage: 3s

Mise à jour de la mesure: 1 lecture/seconde

Précision (par rapport au fond d'échelle): ± 1% + 1 digit

PROGRAMMATION

Programmation des paramètres: 2 touches en façade

Conservation des paramètres de configuration: mémoire permanente (EEPROM) sans batterie

Accès à la programmation: combinaison de touches

PARAMETRES PROGRAMMABLES

ENTREE

Sélection grandeur entrée: tension (mV - V) ou courant (mA)

Calibres entrée Un: 1 - 5 - 10V ou 50 - 75 - 60 - 100 - 150mV

Calibres courant In: 1 - 5 - 10 - 20 - 4...20mA

Type d'entrée: unidirectionnelle positive, unidirectionnelle négative, bidirectionnelle

Unidirectionnelle positive: 0...+Un ou 0...+In (ex. 0...+10V / 0...+20mA / 0...+60mV)

Unidirectionnelle négative: -Un...0 ou -In...0 (ex. -10...0V / -20...0mA / -60...0mV)

Bidirectionnelle: -Un...+Un ou -In...+In (ex. -10...+10V / -20...+20mA / -60...+60mV)

AFFICHAGE

Valeur début et fond d'échelle: -1999...1999

Polarité début et fond d'échelle: - ou +

Point décimal (virgule): 1999. - 199.9 - 19.99 - 1.999

ENTREE

Raccordement: direct

Mesure: tension ou courant continu

Forme d'onde: continue

Tension nominale Un: 50mV - 60mV - 75mV - 100mV - 150mV

Impédance d'entrée: ≥ 40kΩ

Tension nominale Un: 1V - 5V - 10V

Impédance d'entrée: ≥ 300kΩ

Courant nominal In: 1mA - 5mA

Chute de tension: ≤ 1V

Courant nominal In: 10mA - 20mA - 4...20mA

Chute de tension: ≤ 200mV

Surcharge permanente: 1,2Un - 1,2In

Surcharge instantanée: 2Un/5s - 2In/5s

DISPLAY

Type of display: 7 segments, red LED's

Digit height: 14mm

N° of display points: 2.000 (3½ digit)

Maximum display: -1999...1999

Engineering unit: user-customizable (adhesive label)

Polarity indication: automatic

Overrange indication (display > 1999): "----"

Out of scale indication (display lower than beginning of scale value):
"----"

Reversed polarity indication 1: "----"

1 just with unidirectional input configuration

Display update: 3s

Measure update: 1 reading/s

Accuracy (referred to full scale): ± 1% + 1 digit

PROGRAMMING

Parameters programming: front keyboards, 2 keys

Hold of configuration parameters: EEPROM memory, non volatile, no battery

Programming access: keys combination

PROGRAMMABLE PARAMETERS

INPUT

Input quantity selection: voltage (mV - V) or current (mA)

Voltage ranges Un: 1 - 5 - 10V or 50 - 75 - 60 - 100 - 150mV

Current ranges In: 1 - 5 - 10 - 20 - 4...20mA

Type of input: unidirectional positive, unidirectional negative, bidirectional

Unidirectional positive: 0...+Un or 0...+In (ex.: 0...+10V / 0...+20mA / 0...+60mV)

Unidirectional negative: -Un...0 or -In...0 (ex.: -10...0V / -20...0mA / -60...0mV)

Bidirectional: -Un...+Un or -In...+In (ex.: -10...+10V / -20...+20mA / -60...+60mV)

DISPLAY

Beginning of scale and full scale value: -1999...1999

Beginning of scale and full scale polarity: - or +

Decimal point (comma): 1999. - 199.9 - 19.99 - 1.999

INPUT

Connection: direct

Measurement: direct current or voltage

Waveform: direct

Voltage rating Un: 50mV - 60mV - 75mV - 100mV - 150mV

Input impedance: ≥ 40kΩ

Voltage rating Un: 1V - 5V - 10V

Input impedance: ≥ 300kΩ

Current rating In: 1mA - 5mA

Voltage drop: ≤ 1V

Current rating In: 10mA - 20mA - 4...20mA

Voltage drop: ≤ 200mV

Continuous overload: 1,2Un - 1,2In

Instantaneous overload: 2Un/5s - 2In/5s

ALIMENTATION AUXILIAIRE

Valeur nominale ca:	20...60V ou 80...270V
Fréquence nominale:	50Hz
Fréquence de fonctionnement:	47...63Hz
Autoconsommation:	≤ 3VA
Valeur nominale cc:	20...150V ou 100...300V
Autoconsommation:	≤ 3W
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:	entrée, alimentation auxiliaire
Tension d'essai 4kV impulsions normalisées 1,2/50µs 0,5J	
Circuits considérés:	entrée, alimentation auxiliaire
Tension d'essai 4kV valeur efficace 50Hz/1 min	
Circuits considérés:	tous les circuits et la masse

COMPATIBILITÉ ELECTROMAGNÉTIQUE
Tests d'émission selon la norme EN/IEC 61326-1
Tests d'immunité selon la norme EN/IEC 61326-1

CONDITIONS D'UTILISATION	
Température de référence:	23°C ± 1°C
Température limite d'utilisation:	-5...55°C
Température limite de stockage:	-40...70°C
Adapté pour l'utilisation en climat tropical	
Puissance max. dissipée ¹ :	≤ 3,6W
¹ Pour le dimensionnement thermique du coffret	

BOITIER	
Boîtier:	encastré (découpe panneau 92x92mm)
Face avant:	96x96mm (99x99mm avec protection IP54)
Profondeur :	103mm
Raccordement :	faston 6,3x0,8mm
Matériau du boîtier:	polycarbonate autoextinguible
Degré de protection (EN/IEC 60529):	IP50 (face avant) IP20 (bornes)
Option:	protection face avant IP54 (avec accessoire)
Poids:	320 grammes

UNITE DE MESURE
Etiquettes adhésives, fournies avec l'appareil

AUXILIARY SUPPLY	
Rated value ac:	20...60V or 80...270V
Rated frequency:	50Hz
Working frequency:	47...63Hz
Rated burden:	≤ 3VA
Rated value dc:	20...150V or 100...300V
Rated burden:	≤ 3W
Protected against incorrect polarity	

INSULATION	(EN/IEC 61010-1)
Installation category:	III
Pollution degree:	2
A.C. voltage test 2,5kV r.m.s. value 50Hz/1 min	
Considered circuits:	input, aux. supply
Impulse voltage test 4kV 1,2/50µs 0,5J	
Considered circuits:	input, aux. supply
A.C. voltage test 4kV r.m.s. value 50Hz/1 min	
Considered circuits:	all circuits and earth

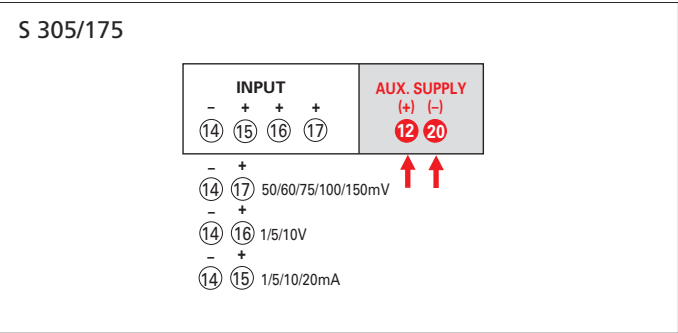
ELECTROMAGNETIC COMPATIBILITY
Emission tests according to EN/IEC 61326-1
Immunity tests according to EN/IEC 61326-1

ENVIRONMENTAL CONDITIONS
<i>Reference temperature: 23°C ± 1°C</i>
<i>Specified temperature range: -5...55°C</i>
<i>Limit temperature range for storage: -40...70°C</i>
<i>Suitable for tropical climates</i>
<i>Max. power dissipation¹: ≤ 3,6W</i>
<i>¹For switchboard thermal calculation</i>

HOUSING	
Housing:	flush mounting (panel cutout 92x92mm)
Front frame:	96x96mm (99x99mm with IP54 protection)
Depth:	103mm
Connections:	fast-on 6,3x0,8mm
Housing material:	self-extinguishing polycarbonate
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals)
Option:	IP54 protection degree (with kit ADGIP549)
Weight:	320 grams

ENGINEERING UNIT
Adhesive label supplied with the meter

A	V	°C	%	W	Hz
kW	MW	kg	bar	var	kvar
Mvar	R.P.M.	m/min	Giri/min	kg/cm²	m³/h



DIMENSIONS DIMENSIONS

