

DIGITAL INDICATORS





Digital indicators

Modular digital indicators 1000 points DGM D4 series



DGMA...



DGMD...



DGMG...



DGMS...



DGMM...



DGMN...

Cat. Nos. Alternating current direct connection True RMS

Cat. Nos.	Vn (aux)	Input	Display	Output
DGMA01A3	24Vac	10A	9.99A	-
DGMA03A3	115Vac			
DGMA06A3	230Vac			
DGMA0HA3	20÷150Vdc+48Vac			
DGMA0LA3	150÷250Vdc			
DGMA01A4	24Vac	20A	20A	-
DGMA03A4	115Vac			
DGMA06A4	230Vac			
DGMA0HA4	20÷150Vdc+48Vac			
DGMA0LA4	150÷250Vdc			
DGMA21A3	24Vac	10A	9.99A	2 alarm relays
DGMA23A3	115Vac			
DGMA26A3	230Vac			
DGMA2HA3	20÷150Vdc+48Vac			
DGMA2LA3	150÷250Vdc			

Cat. Nos. Alternating voltage direct connection up to 100V or by VT with secondary 100V - True RMS

Cat. Nos.	Vn (aux)	Input	Display	Output
DGMD01D1	24Vac	100V	Primary VT 99.9V	-
DGMD03D1	115Vac			
DGMD06D1	230Vac			
DGMD0HD1	20÷150Vdc+48Vac			
DGMD0LD1	150÷250Vdc			
DGMD21D1	24Vac	100V	Primary VT 99.9V	2 alarm relays
DGMD23D1	115Vac			
DGMD26D1	230Vac			
DGMD2HD1	20÷150Vdc+48Vac			
DGMD2LD1	150÷250Vdc			

NOTE: Selectable VT primary voltages: 100/120/150/160/200/250/300/400/500/600/700/750/800V - 1/1,2/1,5/1,6/2/2,5/3/4/5/6/7/7,5/8/10/15/20/25/30/40/50/60/70/75/80/100/120/150/160/200/250kV

Cat. Nos. Network frequency

Cat. Nos.	Vn (aux)	Input	Display	Output
DGMS01F1	24Vac	100÷500V 10÷100Hz	10÷99,9Hz	-
DGMS03F1	115Vac			
DGMS06F1	230Vac			
DGMS0HF1	20÷150Vdc+48Vac			
DGMS21F1	24Vac	100÷500V 10÷100Hz	10÷99,9Hz	2 alarm relays
DGMS23F1	115Vac			
DGMS26F1	230Vac			
DGMS2HF1	20÷150Vdc+48Vac			

Cat. Nos. Alternating current by CT Alternating voltage direct connection True RMS

Cat. Nos.	Vn (aux)	Input	Display	Output
DGMG01C1	24Vac	5A-500Vac	Primary CT 500V	-
DGMG03C1	115Vac			
DGMG06C1	230Vac			
DGMG0HC1	20÷150Vdc+48Vac			
DGMG0LC1	150÷250Vdc			
DGMG01C2	24Vac	1A-500Vac	Primary CT 500V	-
DGMG03C2	115Vac			
DGMG06C2	230Vac			
DGMG0HC2	20÷150Vdc+48Vac			
DGMG0LC2	150÷250Vdc			
DGMG21C1	24Vac	5A-500Vac	Primary CT 500V	2 alarm relays
DGMG23C1	115Vac			
DGMG26C1	230Vac			
DGMG2HC1	20÷150Vdc+48Vac			
DGMG2LC1	150÷250Vdc			
DGMG21C2	24Vac	1A-500Vac	Primary CT 500V	2 alarm relays
DGMG23C2	115Vac			
DGMG26C2	230Vac			
DGMG2HC2	20÷150Vdc+48Vac			
DGMG2LC2	150÷250Vdc			

NOTE: primary currents of selectable CT: 5/10/15/20/25/30/40/50/60/70/75/80/100/120/150/160/200/250/300/400/500/600/700/750/800A - 1/1,2/1,5/1,6/2/2,5/3/4/5/6/7/7,5/8kA

Cat. Nos. Unidirectional direct current by external shunt

Cat. Nos.	Vn (aux)	Input	Display	Output
DGMM01L4	24Vac	0÷60/100/150mV	Current shunt	-
DGMM03L4	115Vac			
DGMM06L4	230Vac			
DGMM0HL4	20÷150Vdc+48Vac			
DGMM0LL4	150÷250Vdc			
DGMM21L4	24Vac	0÷60/100/150mV	Current shunt	2 alarm relays
DGMM23L4	115Vac			
DGMM26L4	230Vac			
DGMM2HL4	20÷150Vdc+48Vac			
DGMM2LL4	150÷250Vdc			

NOTE: selectable shunt currents: 5/10/15/20/25/30/40/50/60/70/75/80/100/120/150/160/200/250/300/400/500/600/700/750/800A - 1/1,2/1,5/1,6/2/2,5/3/4/5/6/7/7,5/8kA

Cat. Nos. Unidirectional direct voltage direct connection

Cat. Nos.	Vn (aux)	Input	Display	Output
DGMN01N6	24Vac	0÷60/100/150mV	0...99,9V 0...500V	-
DGMN03N6	115Vac			
DGMN06N6	230Vac			
DGMN0HN6	20÷150Vdc+48Vac			
DGMN0LN6	150÷250Vdc			
DGMN21N6	24Vac	0÷60/100/150mV	0...99,9V 0...500V	2 alarm relays
DGMN23N6	115Vac			
DGMN26N6	230Vac			
DGMN2HN6	20÷150Vdc+48Vac			
DGMN2LN6	150÷250Vdc			

Digital indicators

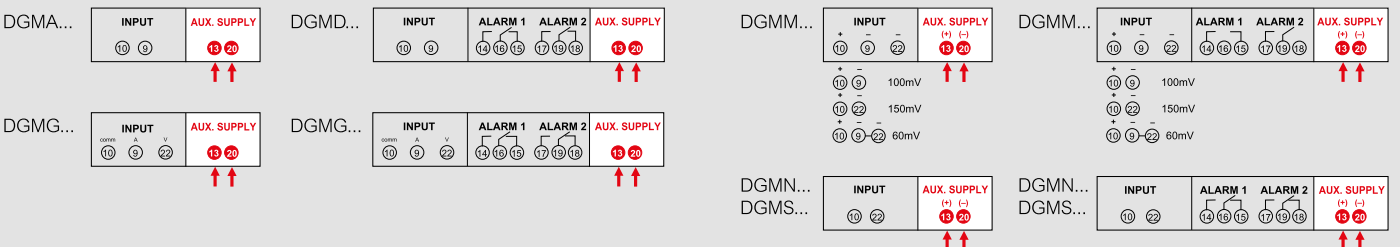
Modular digital indicators 1000 points DGM D4 series

Technical characteristics

MODEL	DGMA...	DGMD...	DGMG...	DGMS...	DGMM...	DGMN...
TECHNICAL NOTES	NT601	NT598	NT596	NT594	NT599	NT600
DISPLAY						
Type of display:	7 segments, green LED's					
Digit height:	14mm					
N° of display points:	1.000 (3 digit)					
Maximum display:	999	999	999	10...100Hz	999	999
Decimal point:	automatic	automatic	automatic	-	A or kA	V
Overrange indication:	simultaneous lighting of 3 decimal points					
Overrange:	input 12A	input > 1,2In or 1,2Un	-	-	automatic	automatic
Accuracy (referred to full scale):	± 1%+1 digit	± 1%+1 digit	± 1%+1 digit	± 0,1Hz	± 1%+1 digit	± 1%+1 digit
Display update:	2,9s	2,9s	2,9s	1 reading/0,8s	2,9s	2,9s
INPUT						
Connection:	direct	direct (voltage) by external CT /5A - /1A (current)	direct or by external VT	direct	from external shunt /60 - /100 - /150mV	direct
Rated voltage Un:	-	500V	100V	100...500V	-	100 - 500V
Rated current In:	10A	5A - 1A	-	-	0,02...12 In	-
Rated frequency fn:	-	-	-	50 and 60Hz	-	-
Measuring range:	0,2...12A	10...600V 0,1...6A(In 5A) - 0,02...1,2A (In 1A)	5...120V	-	-	0,02...1,2Un
Rated burden:	≤ 1VA	≤ 0.1VA - ≤ 0,6VA	≤ 0.1VA	≤ 0.1VA	-	-
Measure:	true RMS value					
Input signal waveform:	symmetric wave					
Rated frequency fn:	50Hz	50Hz	50Hz	-	-	-
Working frequency:	47...420Hz	47...420Hz	47...420Hz	10...100Hz	-	-
Input impedance:	-	-	-	-	≥ 70kΩ(150mV) - ≥ 47kΩ(100mV) - ≥ 28kΩ(60mV)	≥ 200kΩ(Un 100V) - ≥ 1MΩ(Un 500V)
Continuous overload:	12A	1,2In - 1,2Un	120V	1,2 Un	-	1,2Un
Instantaneous overload:	-	2In/5s	-	-	2In/5s	-
Form factor:	-	-	-	1.11	-	-
ALARMS						
Programmables alarms:	2 (min or max)					
Programmable set-point:	0...12A	0...120% selected range	10...100Hz	0...120% selected range	-	-
Programmables hysteresis:	0...set-point					
Delay:	programmable 1...60s					
Delay accuracy:	±10%					
Reset time:	≤ 500ms					
Output:	2 relays with SPDT contacts, potential free					
Contacts range:	5A 250Vac - 0,5A 100Vdc					
Accuracy (referred to full scale):	±1,5%					
AUXILIARY SUPPLY						
Rated value Uaux ac:	24-48-115-230-240V					
Tolerance:	±10% Uaux ac - 40...60V (Uaux 48V)					
Rated frequency:	± 50%Hz					
Working frequency:	47...63Hz					
Rated burden:	≤ 3.5VA					
Rated value Uaux dc:	20÷150Vdc-150÷250Vdc					
Rated burden:	≤ 2.5W					
ELECTROMAGNETIC COMPATIBILITY						
Emission/immunity tests according to:	EN/IEC 61326-1	EN EN 55022 (cl.B) and EN/IEC 61326-1	EN/IEC 61326-1	EN/IEC 61326-1	EN/IEC 61326-1	EN/IEC 61326-1
ENVIRONMENTAL CONDITIONS						
Nominal temperature range:	-5...55°C					
Limit range for storage and transport:	-40...70°C					
Suitable for tropical climates:	yes					
Max. power dissipation:	≤ 3.5W *					
MECHANICAL FEATURES						
Housing:	4 module DIN 43880 (35mm)					
Connections:	screw terminals					
Housing material:	self-extinguishing polycarbonate					
Protection degree (EN/IEC 60529):	IP50 front frame, IP20 terminals					

* for switchboard thermal calculation

WIRING DIAGRAMS



Digital indicators

Flush mounting digital indicators 2000 points DGP 36 P2k - DGP 72 P2k - DGP 96 P2k series



Completely programmable:

- Programmable input for alternating or direct voltage 500V, display in autoscaling with resolution 0,1V up to 200V and 1V over 200V.
- Programmable input for alternating or direct current 10A, display with resolution 0,01A.
- Programmable input for network frequency 10...100Hz or 380...420Hz display with resolution 0,1Hz or 1Hz respectively.
- Programmable input for alternating voltage from VT with secondary 100-110-115-120V, 23 selectable VT primary display (230/300/400/500/600/660/690/800/1000V - 3/3,3/5/5,5/6/6,6/10/11/13,8/15/20/22/30kV).
- Programmable input for alternating current from CT with secondary 1-5A, 33 selectable CT primary display (5/10/15/20/25/30/40/50/60/75/80/100/120/125/150/160/200/250/300/400/500/600/750/800/1000/1200/1250/1500/1600/2000A - 2,5/3/4kA).
- Programmable input for indirect alternating or direct voltage any value between 50 and 500V, programmable corresponding display (max indication 1999).
- Programmable input for indirect alternating or direct current any value between 1 and 10A, programmable corresponding display (max indication 1999).

Alternating current direct connection or by CT
Alternating voltage direct connection or by VT
Network frequency
Direct or indirect bidirectional direct current
Direct or indirect bidirectional direct voltage
True RMS

Cat. Nos.

DGP 36 P2k	DGP 72 P2k	DGP 96 P2k	Vn (aux)	Input	Display
DG3P03P5	DG8P03P5	DG9P03P5	115Vac	programmable	programmable (max ± 1999)
DG3P06P5	DG8P06P5	DG9P06P5	230Vac		
DG3P0MP5	DG8P0MP5	DG9P0MP5	20÷150Vdc		
			20÷60Vac		

Accessories

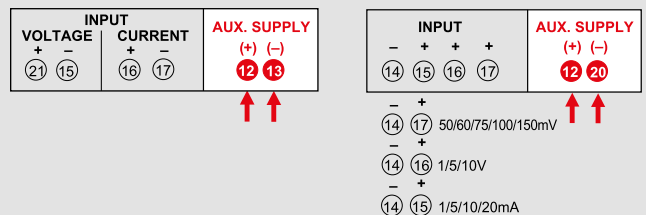
Cat. Nos.	Description
ADGIP543	Protection front cover IP54 for 72x36 meters
ADGIP547	Protection front cover IP54 for 96x96 meters
ADGIP549	Protection front cover IP54 for 72x72 meters
AV652	Protection front cover IP65 for 72x72 and 96x96mm meters

Technical characteristics

MODEL	DGP 36 P2K	DGP 72 P2K	DGP 96 P2K
TECHNICAL NOTES	NT874	NT877	NT878
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		
Accuracy (referred to full scale):	±0,2% + 1 digit	±1% + 1 digit	±1% + 1 digit
INPUT			
Connection:	direct		
Waveform:	direct		
Rated voltage Un:	500V		
Rated current In:	10A		
Measuring range:	10...600V - 50mA...12A 10...100Hz - 380...420Hz		
Input impedance:	≤ 3,3MΩ		
Continuous overload:	1.2Un - 1.2In		
Instantaneous overload:	2Un/5s - 2UI/5s		
Voltage drop:	≤ 0,25V (10A)	≤ 0,2V (10A)	≤ 0,2V (10A)
Working voltage:	50...500V		
Measure:	true RMS value		
Waveform:	symmetric wave		
AUXILIARY SUPPLY			
Rated value Uaux ac:	115V - 230+240V - 20...60V		
Tolerance:	103...126V (Uaux.115V) - 207...253V (Uaux.230+240V) - (Uaux.20...60V)		
Rated frequency:	± 50%Hz		
Working frequency:	47...63Hz		
Rated burden:	≤ 4VA (253V)		
Rated value Uaux dc:	20...150V		
Rated burden:	≤ 3W		
ELECTROMAGNETIC COMPATIBILITY			
Emission tests according to:	EN/IEC 61326-1		
Immunity tests according to:	EN/IEC 61326-1		
ENVIRONMENTAL CONDITIONS			
Nominal temperature range:	-5...55°C		
Limit range for storage and transport:	-40...70°C		
Suitable for tropical climates	yes		
Max. power dissipation:	≤ 2W *		
MECHANICAL FEATURES			
Flush mounting panel cutout:	68x33mm	68x68mm	92x92mm
Front frame:	72x36mm (75x39mm for IP54)	72x72mm (75x75mm for IP54)	96x96mm (99x99mm for IP54)
Depth:	86mm	108mm	
Connections:	faston 6,3x0,8mm		
Housing material:	self-extinguishing polycarbonate		
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals) Option: IP54 (with kit)		

* for switchboard thermal calculation

Wiring diagrams



Digital indicators

Flush mounting digital indicators 2000 points - DGP 36 P2k - DGP 72 P2k - DGP 96 P2k series



Cat. Nos. Bidirectional direct current and voltage by transducers/sensors/shunt					
DGP 36 P2k	DGP 72 P2k	DGP 96 P2k	Vn (aux)	Input	Display
DG3P0NP1	DG8P0NP1	DG9P0NP1	80÷270Vac 100÷300Vdc	programmable	programmable (max ±1999)
DG3P0MP1	DG8P0MP1	DG9P0MP1	20÷150Vdc 20÷60Vac		

NOTE: programmable inputs ±1/5/10/20mA - 4...20mA - ±50/60/75/100/150mV - ±1/5/10V

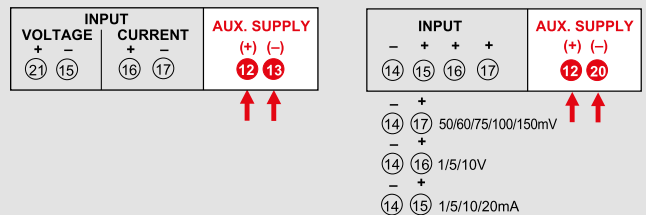
Cat. Nos. Accessories	
Cat. Nos.	Description
ADGIP543	Protection front cover IP54 for 72x36 meters
ADGIP547	Protection front cover IP54 for 96x96 meters
ADGIP549	Protection front cover IP54 for 72x72 meters
AV652	Protection front cover IP65 for 72x72 and 96x96mm meters

Technical characteristics

MODEL	DGP 36 P2K	DGP 72 P2K	DGP 96 P2K
TECHNICAL NOTES	NT850	NT852	NT853
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		
Accuracy (referred to full scale):	± 0,2% + 1 digit		
INPUT			
Connection:	direct		
Waveform:	direct		
Rated voltage Un:	50-60-75-100-150mV - 1-5-10V		
Rated current In:	1-5-10-20mA - 4...20mA		
Input impedance:	≥ 40kΩ - ≥ 300kSymbol		
Continuous overload:	1,2Un - 1,2In		
Instantaneous overload:	2Un/5s - 2In/5s		
Voltage drop:	≤ 1V - ≤ 200mV		
Measure:	direct current or voltage		
AUXILIARY SUPPLY			
Rated value Uaux ac:	20...60V or 80...270V		
Rated frequency:	± 50%Hz		
Working frequency:	47...63Hz		
Rated burden:	≤ 3VA	≤ 3VA	≤ 4VA (253V)
Rated value Uaux dc:	20...150V or 100...300V		
Rated burden:	≤ 3W		
ELECTROMAGNETIC COMPATIBILITY			
Emission tests according to:	EN/IEC 61326-1		
Immunity tests according to:	EN/IEC 61326-1		
ENVIRONMENTAL CONDITIONS			
Nominal temperature range	-5...55°C		
Limit range for storage and transport:	-40...70°C		
Suitable for tropical climates	yes		
Max. power dissipation:	≤ 2W *	≤ 3.6W *	≤ 3.6W *
MECHANICAL FEATURES			
Flush mounting panel cutout:	68x33mm	68x68mm	92x92mm
Front frame:	72x36mm (75x39mm for IP54)	72x72mm (75x75mm for IP54)	96x96mm (99x99mm for IP54)
Depth:	86mm	108mm	
Connections:	faston 6,3x0,8mm		
Housing material:	self-extinguishing polycarbonate		
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals) Option: IP54 (with kit)		

* for switchboard thermal calculation

Wiring diagrams



Digital indicators

Flush mounting digital indicators - DGP 96 series



DG4A...
96x48mm



DG4D...
96x48mm



DG4P... 96x48mm



DG4Q...
96x48mm

Cat. Nos.	Alternating current direct connection - True RMS - 1000 points			
Cat. Nos.	Vn (aux)	Input	Display	Output
DG4A01A3	24Vac	10A	9.99A	-
DG4A03A3	115Vac			
DG4A06A3	230Vac			
DG4A0HA3	20÷150Vdc+48Vac	10A	9.99A	2 alarm relays
DG4A0LA3	150÷250Vdc			
DG4A21A3	24Vac			
DG4A23A3	115Vac	10A	9.99A	2 alarm relays
DG4A26A3	230Vac			
DG4A2HA3	20÷150Vdc+48Vac			
DG4A2LA3	20÷150Vdc			

Cat. Nos.	Alternating voltage direct connection up to 100V or by VT with secondary 100V - True RMS - 1000 points			
Cat. Nos.	Vn (aux)	Input	Display	Output
DG4D01D1	24Vac	100V	Setting primary VT	-
DG4D03D1	115Vac			
DG4D06D1	230Vac			
DG4D0HD1	20÷150Vdc+48Vac	100V	Setting primary VT	2 alarm relays
DG4D0LD1	150÷250Vdc			
DG4D21D1	24Vac			
DG4D23D1	115Vac	100V	Setting primary VT	2 alarm relays
DG4D26D1	230Vac			
DG4D2HD1	20÷150Vdc+48Vac			
DG4D2LD1	20÷150Vdc			

NOTE: Selectable VT primary voltages: 100/120/150/160/200/250/300/400/500/600/700/750/800V - 1/1, 2/1, 5/1, 6/2/2, 5/3/4/5/6/7/7, 5/8/10/15/20/25/30/40/50/60/70/75/80/100/120/150/160/200/250kV

Cat. Nos.	Network frequency - 1000 points			
Cat. Nos.	Vn (aux)	Input	Display	Output
DG4S03F1	24Vac	100...500V 10...100Hz	Setting primary VT	
DG4S06F1	115Vac			
DG4S07F1	230Vac			
DG4S0HF1	20÷150Vdc+48Vac			

Cat. Nos.	Bidirectional direct current and voltage by transducers/sensors/shunt - 2000 points			
Cat. Nos.	Vn (aux)	Input	Display	Output
DG4P01P2	24Vac	Program-mable	Program-mable (max ±1999)	-
DG4P03P2	115Vac			
DG4P06P2	230Vac			
DG4P0HP2	20÷150Vdc+48Vac	Program-mable	Program-mable (max ±1999)	2 alarm relays
DG4P0LP2	150÷250Vdc			
DG4P01P22	24Vac			
DG4P03P22	115Vac	Program-mable	Program-mable (max ±1999)	24Vdc (30mA)
DG4P06P22	230Vac			
DG4P21P2	24Vac			
DG4P23P2	115Vac	Program-mable	Program-mable (max ±1999)	2 alarm relays
DG4P26P2	230Vac			
DG4P2HP2	20÷150Vdc+48Vac			
DG4P2LP2	150÷250Vdc	Program-mable	Program-mable (max ±1999)	2 alarm relays 24Vdc (30mA)
DG4P21P22	24Vac			
DG4P23P22	115Vac			
DG4P26P22	230Vac			

NOTE: programmable inputs ±0,5...±2mA/±5...±20mA/4...20mA/±50...±200mV/±5...±20V/±50...±200V

Cat. Nos.	Bidirectional direct current and voltage by transducers/sensors/shunt - 10000 points			
Cat. Nos.	Vn (aux)	Input	Display	Output
DG4Q01P2	24Vac	Program-mable	Program-mable (max 9999)	-
DG4Q03P2	115Vac			
DG4Q06P2	230Vac			
DG4Q0HP2	20÷150Vdc+48Vac	Program-mable	Program-mable (max 9999)	24Vdc (30mA)
DG4Q0LP2	150÷250Vdc			
DG4Q01P22	24Vac			
DG4Q03P22	115Vac	Program-mable	Program-mable (max 9999)	24Vdc (30mA)
DG4Q06P22	230Vac			
DG4Q21P2	24Vac			
DG4Q23P2	115Vac	Program-mable	Program-mable (max 9999)	2 alarm relays
DG4Q26P2	230Vac			
DG4Q2HP2	20÷150Vdc+48Vac			
DG4Q2LP2	150÷250Vdc	Program-mable	Program-mable (max 9999)	2 alarm relay 24Vdc (30mA)
DG4Q21P22	24Vac			
DG4Q23P22	115Vac			
DG4Q26P22	230Vac			

NOTE: Programmable inputs 0,5...2mA/5...20mA/4...20mA/50...200mV/5...20V/50...200V

Cat. Nos.	Unidirectional direct current and voltage by transducers/sensors/shunt - 10000 points			
Cat. Nos.	Vn (aux)	Input	Display	Output
DG4Q21P2	24Vac	Program-mable	Program-mable (max 9999)	2 alarm relays
DG4Q23P2	115Vac			
DG4Q26P2	230Vac			
DG4Q2HP2	20÷150Vdc+48Vac	Program-mable	Program-mable (max 9999)	2 alarm relay 24Vdc (30mA)
DG4Q2LP2	150÷250Vdc			
DG4Q21P22	24Vac			
DG4Q23P22	115Vac	Program-mable	Program-mable (max 9999)	2 alarm relay 24Vdc (30mA)
DG4Q26P22	230Vac			
DG4Q21P2	24Vac			

NOTE: Programmable inputs 0,5...2mA/5...20mA/4...20mA/50...200mV/5...20V/50...200V* Complete the code showing the display corresponding to input

Cat. Nos.	Accessories
ADGIP544	Description Protection front cover IP54
AV654	Description Protection front cover IP65

Digital indicators

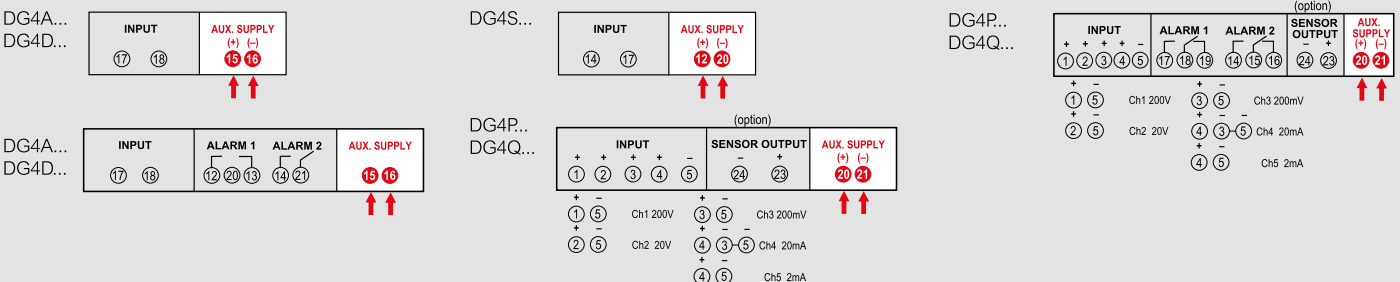
Flush mounting digital indicators - DGP 96 series

Technical characteristics 96x48mm

MODEL	DG4A...	DG4D...	DG4S...	DG4P0...	DG4P2...	DG4Q0...	DG4Q2...
TECHNICAL NOTES	NT623	NT624	NT047	NT530	NT531	NT550	NT551
DISPLAY							
Type of display:	7 segments, red LED's						
Digit height:	14mm						
N° of display points:	1.000 (3 digit)	1.000 (3 digit)	1.000 (3 digit)	2.000 (3 1/2 digit)	2.000 (3 1/2 digit)	10.000 (4 digit)	10.000 (4 digit)
Maximum display:	999	999	99.9	-1999...1999	-1999...1999	9999	9999
Engineering unit:	A	V or kV	Hz	user-customizable	user-customizable	user-customizable	user-customizable
Decimal point:	automatic	automatic	fixed (00.0)	-	-	-	-
Overrange:	input 12A	input > 1,2Un	-	-	-	-	-
Accuracy (referred to full scale):	± 1% + 1 digit	± 1% + 1 digit	±0,1Hz	±(0,25% + K) + 1 digit			
Display update:	2,9s	2,9s	0.8s	3 reading/s	3 reading/s	3 reading/s	3 reading/s
INPUT							
Connection:	direct	direct or by external VT	-	direct			
Rated Voltage Un:	-	100V	100...500V	200mV – 20V - 200V			
Rated current In:	10A	-	-	20mA - 2mA			
Measuring range:	0,2...12A	5...120V	-	-Un...0...Un or -In...0...In (min) - 0...0,25Un or 0...0,25In (max)			
Rated burden:	≤ 1VA	≤ 0.1VA	≤ 0.1VA	-	-	-	-
Measure:	true RMS value		true RMS value	direct or pulsating current or voltage, average value			
Waveform:	symmetric wave		symmetric sinusoidal, form factor 1,11	direct or pulsating with frequency ≥ 50Hz			
Rated frequency:	± 50%Hz			-	-	-	-
Working frequency:	47...420Hz			-	-	-	-
Continuous overload:	12A	120V	-	1,2In – 1,2Un			
Instantaneous overload:	-	-	-	2Un/5s – 2In/5s			
ALARMS							
Programmables alarms:	2	2	-	-	2	-	2
Set-point (programmable):	0...12A	-	-	-	-1999...1999 digit	-	-1999...1999 digit
Hysteresis (programmable):	0...set-point	-	-	-	-1999...1999 digit	-	-1999...1999 digit
Delay (programmable):	1...60s	-	-	-	1...60s	-	1...60s
Delay accuracy:	±10%	-	-	-	±10%	-	±10%
Reset time:	≤ 500ms	-	-	-	≤ 500ms	-	≤ 500ms
Output:	2 relays with SPDT contacts, potential free		-	-	2 relays with SPDT contacts, voltage free		-
Contacts range:	5A 250Vac – 0,5A 100Vdc		-	-	5A 250Vac – 0,5A 100Vdc		-
Accuracy (referred to full scale):	±1,5%	±1,5%	-	-	2 (0,25%+K)+ 1 digit		-
AUXILIARY SUPPLY							
Rated value Uaux ac:	24 – 48 – 115 – 230 – 240V						
Tolerance:	±10% Uaux ca – 40...60V (Uaux 48V)						
Rated frequency:	± 50%Hz						
Working frequency:	47...63Hz						
Rated burden:	≤ 3.5VA			≤ 4.5VA			
Rated value Uaux dc:	20...150Vdc – 150...250Vdc						
Rated burden:	≤ 2.5W			≤ 3W			
ELECTROMAGNETIC COMPATIBILITY							
Emission tests according to:	EN/IEC 61326-1						
Immunity tests according to:	EN/IEC 61326-1						
ENVIRONMENTAL CONDITIONS							
Nominal temperature range:	-5...55°C						
Limit range for storage and transport:	-40...70°C						
Suitable for tropical climates	yes						
Max. power dissipation:	≤ 3.5W *			≤ 3.6W *			
MECHANICAL FEATURES							
Housing:	flush mounting (panel cutout 92x45mm)						
Front frame:	96x48mm (99x52mm with IP54 protection)						
Depth:	162mm						
Connections:	faston 6,3x0,8mm						
Housing material:	self-extinguishing polycarbonate						
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals) - Option: IP54 protection degree (with kit ADGIP544)						

* for switchboard thermal calculation

Wiring diagrams



Digital indicators

Flush mounting digital indicators 1000 points - DGP 96 - DGQ72 series



DGP 96
96x48mm



DGQ72
72x72mm

Cat. Nos.		Alternating current measurement by CT Alternating voltage direct connection True RMS			
DGP 96	DGQ72	Vn (aux)	Input	Display	Output
DG4G01C1		24Vac	5A - 500V	Setting primary CT	-
DG4G03C1		115Vac			
DG4G06C1		230Vac			
DG4G0HC1		20÷150Vdc+48Vac			
DG4G0LC1		150÷250Vdc			
DG4G01C2		24Vac	1A - 500V	Setting primary CT	-
DG4G03C2		115Vac			
DG4G06C2		230Vac			
DG4G0HC2		20÷150Vdc+48Vac			
DG4G0LC2		150÷250Vdc			
DG4G21C1	DG7G21C1	24Vac	5A - 500V	Setting primary CT	2 alarm relays
DG4G23C1	DG7G23C1	115Vac			
DG4G26C1	DG7G26C1	230Vac			
DG4G2HC1	DG7G2HC1	20÷150Vdc+48Vac			
DG4G2LC1	DG7G2LC1	20÷150Vdc			
DG4G21C2	DG7G21C2	24Vac	1A - 500V	Setting primary CT	2 alarm relays
DG4G23C2	DG7G23C2	115Vac			
DG4G26C2	DG7G26C2	230Vac			
DG4G2HC2	DG7G2HC2	20÷150Vdc+48Vac			
DG4G2LC2	DG7G2LC2	20÷150Vdc			

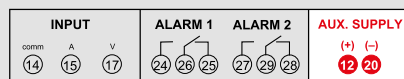
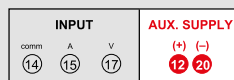
NOTE: Selectable shunt currents 5/10/15/20/25/30/40/50/60/70/75/80/100/120/150/160/200/250/300/400/500/600/700/750/800A - 1/1,2/1,5/1,6/2/2,5/3/4/5/6/7/7,5/8kA

Technical characteristics

MODEL	DGQP96	DGQ 72
TECHNICAL NOTES	NT533	NT602
DISPLAY		
Type of display:	7 segments, red LED's	
Digit height:	14mm	
N° of display points:	1.000 (3 digit)	
Maximum display:	999	
Engineering unit:	A or kA or V	
Decimal point:	automatic	
Overrange:	input > 1,2In or 1,2Un	
Accuracy (referred to full scale):	± 1% + 1 digit	
Display update:	2,9s	
INPUT		
Connection:	direct or by external CT /5A - /1A	
Rated Voltage Un:	500V	
Rated current In:	5A - 1A	
Measuring range:	10...600V - 0,1...6A (In 5A) 0,02...1,2A (In1A)	
Rated burden:	≤ 0.1VA (Un) - ≤ 0.6VA (In)	
Measure:	true RMS value	
Waveform:	symmetric wave	
Rated frequency:	± 50%Hz	
Working frequency:	47...420Hz	
Continuous overload:	1,2In - 1,2Un	
Instantaneous overload:	2In/5s	
ALARMS		
Programmables alarms:	2	
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	
Contacts range:	5A 250Vac - 0,5A 100Vdc	
Accuracy (referred to full scale):	±1,5%	
AUXILIARY SUPPLY		
Rated value Uaux ac:	24-48-115-230-240V	
Tolerance:	±10% Uaux ac - 40...60V (Uaux 48V)	
Rated frequency:	± 50%Hz	
Working frequency:	47...63Hz	
Rated burden:	≤ 3.5VA	
Rated value Uaux dc:	20...150Vdc - 150...250Vdc	
Rated burden:	≤ 2.5W	
ELECTROMAGNETIC COMPATIBILITY		
Emission tests according to:	EN/IEC 61326-1	
Immunity tests according to:	EN/IEC 61326-1	
ENVIRONMENTAL CONDITIONS		
Nominal temperature range	-5...55°C	
Limit range for storage and transport:	-40...70°C	
Suitable for tropical climates	yes	
Max. power dissipation:	≤ 3.5W *	≤ 3.5W *
MECHANICAL FEATURES		
Flush mounting panel cutout:	92x45mm	68x68mm
Front frame:	96x48mm (99x52mm for IP54)	72x72mm (75x75mm for IP54)
Depth:	162mm	108mm
Connections:	faston 6,3x0,8mm	
Housing material:	self-extinguishing polycarbonate	
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals) - Option: IP54 (with kit)	

* for switchboard thermal calculation

Wiring diagrams



Digital indicators

Flush mounting digital indicators 1000 points - DGP 96 - DGQ72 series



DGP 96
96x48mm



DGQ72
72x72mm

Unidirectional direct current by external shunt

Cat. Nos.		Vn (aux)	Input	Display	Output
DGP 96	DGQ72				
DG4M01L4		24Vac	0...60/100 /150mV	Current shunt	-
DG4M03L4		115Vac			
DG4M06L4		230Vac			
DG4M0HL4		20÷150Vdc+48Vac			
DG4M0LL4		150÷250Vdc			
DG4M21L4	DG7M21L4	24Vac	0...60/100 /150mV	Current shunt	2 alarm relays
DG4M23L4	DG7M23L4	115Vac			
DG4M26L4	DG7M26L4	230Vac			
DG4M2HL4	DG7M2HL4	20÷150Vdc+48Vac			
DG4M2LL4	DG7M2LL4	20÷150Vdc			

NOTE: Selectable shunt currents 5/10/15/20/25/30/40/50/60/70/75/80/100/120/150/160/200/250/300/400/500/600/700/750/800A - 1/1,2/1,5/1,6/2/2,5/3/4/5/6/7/7,5/8kA

Accessories

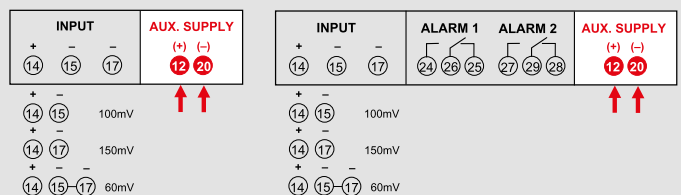
Cat. Nos.	Description
ADGIP544	Protection front cover IP54 for 96x48mm meters
AV654	Protection front cover IP65 for 96x48mm meters
ADGIP547	Protection front cover IP54 for 72x72mm meters
AV652	Protection front cover IP65 for 72x72mm meters

Technical characteristics

MODEL	DGQP96	DGQ 72
TECHNICAL NOTES	NT626	NT607
DISPLAY		
Type of display:	7 segments, red LED's	
Digit height:	14mm	
N° of display points:	1.000 (3 digit)	
Maximum display:	999	
Engineering unit:	A or kA	
Decimal point:	automatic	
Overrange:	input > 1,2In	
Accuracy (referred to full scale):	± 1% + 1 digit	
Display update:	2,9s	
INPUT		
Connection:	from external shunt /60 - /100 - /150mV	
Measuring range:	0,02...12In	
Input impedance:	≥ 70kΩ(150mV) - ≥ 47kΩ(100mV) ≥ 28kΩ(60mV)	
Instantaneous overload:	2In/5s	
ALARMS		
Programmables alarms:	2	
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	
Contacts range:	5A 250Vac - 0,5A 100Vdc	
Accuracy (referred to full scale):	±1,5%	
AUXILIARY SUPPLY		
Rated value Uaux ac:	24 - 48 - 115 - 230 - 240V	
Tolerance:	±10% Uaux ca - 40...60V (Uaux 48V)	
Rated frequency:	± 50%Hz	
Working frequency:	47...63Hz	
Rated burden:	≤ 3.5VA	
Rated value Uaux dc:	20...150Vdc - 150...250Vdc	
Rated burden:	≤ 2.5W	
ELECTROMAGNETIC COMPATIBILITY		
Emission tests according to:	EN/IEC 61326-1	
Immunity tests according to:	EN/IEC 61326-1	
ENVIRONMENTAL CONDITIONS		
Nominal temperature range:	-5...55°C	
Limit range for storage and transport:	-40...70°C	
Suitable for tropical climates	yes	
Max. power dissipation:	≤ 3.5W *	≤ 2.5W *
MECHANICAL FEATURES		
Flush mounting panel cutout:	92x45mm	68x68mm)
Front frame:	96x48mm (99x52mm for IP54)	72x72mm (75x75mm for IP54)
Depth:	162mm	
Connections:	faston 6,3x0,8mm	
Housing material:	self-extinguishing polycarbonate	
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals) - Option: IP54 (with kit)	

* for switchboard thermal calculation

Wiring diagrams



Digital indicators

Flush mounting digital indicators 1000 points - DGP 96 - DGQ72 series



DG4N...
96x48mm



DG7N...
72x72mm

Unidirectional direct voltage direct connection

Cat. Nos.		Vn (aux)	Input	Display	Output
DGP 96	DGQ72	24Vac	0÷100V	0÷99.9V	-
DG4N01N6		115Vac	0÷500V	0÷500V	-
DG4N03N6		230Vac			
DG4N06N6		20÷150Vdc+48Vac			
DG4N0HN6		150÷250Vdc			
DG4N0LN6					
DG4N21N6	DG7N21N6	24Vac	0÷100V	0÷99.9V	2 alarm relays
DG4N23N6	DG7N23N6	115Vac	0÷500V	0÷500V	
DG4N26N6	DG7N26N6	230Vac			
DG4N2HN6	DG7N2HN6	20÷150Vdc+48Vac			
DG4N2LN6	DG7N2LN6	150÷250Vdc			

Accessories

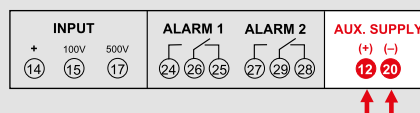
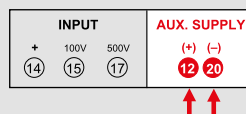
Cat. Nos.	Description
ADGIP544	Protection front cover IP54 for 96x48mm meters
AV654	Protection front cover IP65 for 96x48mm meters
ADGIP547	Protection front cover IP54 for 72x72mm meters
AV652	Protection front cover IP65 for 72x72mm meters

Technical characteristics

MODEL	DGQP96	DGQ 72
TECHNICAL NOTES	NT625	NT608
DISPLAY		
Type of display:	7 segments, red LED's	
Digit height:	14mm	
N° of display points:	1.000 (3 digit)	
Maximum display:	999	
Engineering unit:	V	
Decimal point:	automatic	
Overrange:	input > 1,2Un	
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	
ALARMS		
Programmables alarms:	2	
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	
Contacts range:	5A 250Vac – 0,5A 100Vdc	
Accuracy (referred to full scale):	±1,5%	
AUXILIARY SUPPLY		
Rated value Uaux ac:	24 – 48 – 115 – 230 – 240V	
Tolerance:	±10% Uaux ca – 40...60V (Uaux 48V)	
Rated frequency:	± 50%Hz	
Working frequency:	47...63Hz	
Rated burden:	≤ 3.5VA	
Rated value Uaux dc:	20...150Vdc – 150...250Vdc	
Rated burden:	≤ 2.5W	
ELECTROMAGNETIC COMPATIBILITY		
Emission tests according to:	EN/IEC 61326-1	
Immunity tests according to:	EN/IEC 61326-1	
ENVIRONMENTAL CONDITIONS		
Nominal temperature range	-5...55°C	
Limit range for storage and transport:	-40...70°C	
Suitable for tropical climates	yes	
Max. power dissipation:	≤ 3.5W	≤ 3.5W
MECHANICAL FEATURES		
Flush mounting panel cutout:	92x45mm	68x68mm)
Front frame:	96x48mm (99x52mm for IP54)	72x72mm (75x75mm for IP54)
Depth:	162mm	108mm
Connections:	faston 6,3x0,8mm	
Housing material:	self-extinguishing polycarbonate	
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals) - Option: IP54 (with kit)	

* for switchboard thermal calculation

Wiring diagrams



Digital indicators

Flush mounting digital bargraph - LD 24 series



DG7N...
72x72mm

Cat. Nos.

Ammeter digital bargraph for direct current

Bidirectional direct current measurements
Display any proportional process variable
Input for standard signal: 1 - 5 - 10 - 20mA - 4...20mA

Vertical	Horizontal	Vn (aux)	Input	Display
LD201BGA11	LD201BGA13	18...36Vdc	0...1mA	0...100%
LD201BGB11	LD201BGB13		±1mA	±100%
LD201BGC11	LD201BGC13		0...5mA	0...100%
LD201BGD11	LD201BGD13		±5mA	±100%
LD201BGE11	LD201BGE13		0...10mA	0...100%
LD201BGF11	LD201BGF13		±10mA	±100%
LD201BGG11	LD201BGG13		0...20mA	0...100%
LD201BGH11	LD201BGH13		±20mA	±100%
LD201BGL11	LD201BGL13		4...20mA	0...100%

Cat. Nos.

Voltmeter digital bargraph for direct current

Bidirectional direct voltage measurements
Display any proportional process variable
Input for standard signal: 5 - 10V - 1...5 - 2...10V

Vertical	Horizontal	Vn (aux)	Input	Display
LD202BNC11	LD202BNC13	18...36Vdc	0...5V	0...100%
LD202BND11	LD202BND13		±5V	±100%
LD202BNE11	LD202BNE13		0...10V	0...100%
LD202BNF11	LD202BNF13		±10V	±100%
LD202BNG11	LD202BNG13		1...5V	0...100%
LD202BNH11	LD202BNH13		2...10V	0...100%

Technical characteristics

MODEL	DIRECT CURRENT	DIRECT VOLTAGE
TECHNICAL NOTES	NT026	NT025
DISPLAY		
Type of display:	red LED's bargraph, 30 segments	
Segment size:	2x5mm	
Scale length:	75mm	
Bar position:	horizontal or vertical	
Scale marking:	0...100% - 100...0...100%	
Overrange indication:	blinking of last 10 segments	
Response time:	≤ 100ms	
Accuracy:	± 1 segment	
INPUT DIRECT VOLTAGE		
Connection:	direct	
Rated voltage Un:	-	5-10 -1...5 - 2...10V
Rated current In:	1-5-10-20 4...20mA	-
Measuring range:	0...In or -In...0...In	0...Un or -Un...0...Un
Input impedance:	-	≥ 10MΩ (Un ≤ 2V) - ≥ 300kΩ (Un > 2V)
Continuous overload:	2In	1.2Un
Instantaneous overload:	10In/5s	2Un/5s
Voltage drop:	400mV (In ≤ 20mA) ≤ 200mV (In > 20mA and 4...20mA)	-
AUXILIARY SUPPLY		
Rated value Uaux ac:	18...36Vdc	
Rated burden:	≤ 2W	
ELECTROMAGNETIC COMPATIBILITY		
Emission tests according to:	EN/IEC 61326-1	
Immunity tests according to:	EN/IEC 61326-1	
ENVIRONMENTAL CONDITIONS		
Nominal temperature range	-5...55°C	
Limit range for storage and transport:	-40...70°C	
Suitable for tropical climates	yes	
Max. power dissipation:	≤ 2W *	
MECHANICAL FEATURES		
Housing:	flush mounting (panel cutout 92x22,2mm)	
Front frame:	96x24mm	
Depth:	94mm	
Connections:	fast-on 3x0,8mm	
Housing material:	self-extinguishing polycarbonate	
Protection degree (EN/IEC 60529):	IP50 (front frame) IP20 (terminals)	

* for switchboard thermal calculation

Wiring diagrams

