

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			
	Vn (aux)	Input	Display	Output
DG4A01A3	24Vac	10A	9.99A	-
DG4A03A3	115Vac			
DG4A06A3	230Vac			
DG4A0HA3	20÷150Vdc+48Vac			
DG4A0LA3	150÷250Vdc			
DG4A21A3	24Vac	10A	9.99A	2 alarm relays
DG4A23A3	115Vac			
DG4A26A3	230Vac			
DG4A2HA3	20÷150Vdc+48Vac			
DG4A2LA3	150÷250Vdc			
DG4A2LP2	20÷150Vdc			

Cat. Nos.	Alternating voltage direct connection up to 100V or by VT with secondary 100V - True RMS			
	Vn (aux)	Input	Display	Output
DG4D01D1	24Vac	100V	Setting primary VT	-
DG4D03D1	115Vac			
DG4D06D1	230Vac			
DG4D0HD1	20÷150Vdc+48Vac			
DG4D0LD1	150÷250Vdc			
DG4D21D1	24Vac	100V	Setting primary VT	2 alarm relays
DG4D23D1	115Vac			
DG4D26D1	230Vac			
DG4D2HD1	20÷150Vdc+48Vac			
DG4D2LD1	150÷250Vdc			
DG4D2LP2	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			
	Vn (aux)	Input	Display	
DG4S03F1	115Vac	100...500V 10...100Hz	10.0...99.9 Hz	
DG4S06F1	230Vac			
DG4S0HF1	20÷150Vdc+48Vac			

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

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

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

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

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

Digital indicators

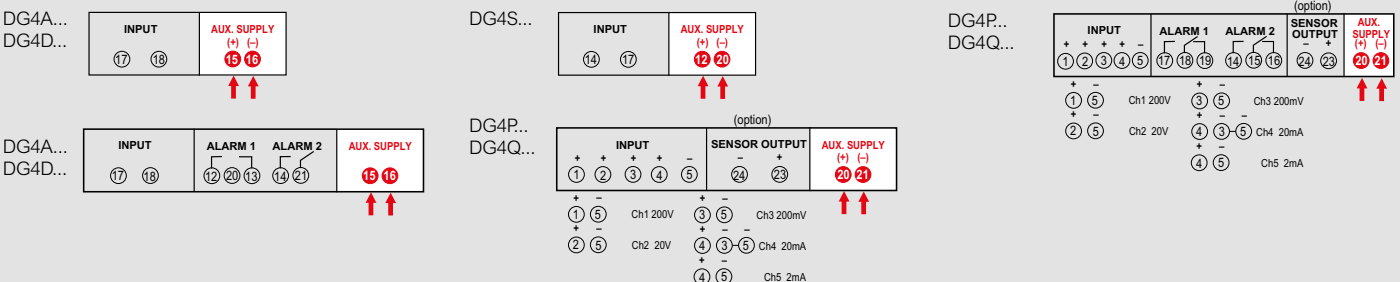
Flush mounting digital indicators - DGP 96 series

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	999	-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	automatic	programmable			
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	10...100Hz	-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		true RMS	direct or pulsating, average value			
Waveform:	symmetric wave		symmetric sinusoidal, form factor 1,11	direct or pulsating with frequency ≥ 50Hz			
Rated frequency:	50Hz		-	-	-	-	-
Working frequency:	47...420Hz		10...100Hz	-	-	-	-
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	-	0...9999 digit
Hysteresis (programmable):	0...set-point	-	-	-	-1999...1999 digit	-	0...9999 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		2 relays with SPDT contacts, voltage free
Contacts range:	5A 250Vac – 0,5A 100Vdc		-	-	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		2 (0,25%+K)+ 1 digit
AUXILIARY SUPPLY							
Rated value Uaux ac:	24 – 48 – 115 – 230V						
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:	103mm						
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			

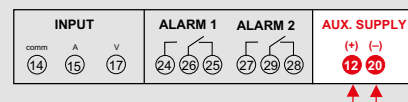
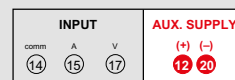
NOTE: Selectable shunt currents 5/10/15/20/25/30/40/50/60/70/75/80/100/120/150/160/200/250/300/400/500/600/700/750/800A - 1/1,2/1,5/1,6/2/2,5/3/4/5/6/7/7,5/8kA

Technical characteristics

MODEL	DGP96	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:	50Hz	
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:	24-48-115-230V	
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	24Vac	0...60/100 /150mV	Current shunt	-
DG4M01L4		115Vac			
DG4M03L4		230Vac			
DG4M06L4		20÷150Vdc+48Vac			
DG4M0HL4		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

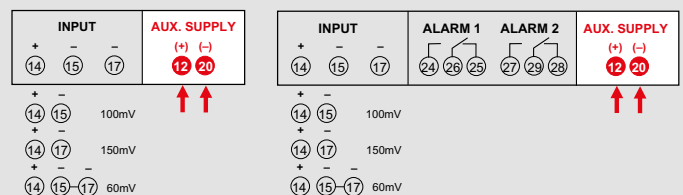
Cat. Nos.	Description
ADGIP544	Protection front cover IP54 for 96x48mm meters
AV654	Protection front cover IP65 for 96x48mm meters
ADGIP547	Protection front cover IP54 for 72x72mm meters
AV652	Protection front cover IP65 for 72x72mm meters

Technical characteristics

MODEL	DGP96	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 - 230V	
Tolerance:	±10% Uaux ca - 40...60V (Uaux 48V)	
Rated frequency:	50Hz	
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:	103mm	75mm
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			
DG4N01N6		115Vac			
DG4N03N6		230Vac			
DG4N06N6		20÷150Vdc+48Vac			
DG4N0HN6		150÷250Vdc			
DG4N0LN6					
DG4N21N6	DG7N21N6	24Vac			
DG4N23N6	DG7N23N6	115Vac			
DG4N26N6	DG7N26N6	230Vac			
DG4N2HN6	DG7N2HN6	20÷150Vdc+48Vac			
DG4N2IN6	DG7N2LN6	150÷250Vdc			
			0÷100V 0÷500V	0÷99.9V 0÷500V	- 2 alarm relays

Cat. Nos.	Accessories	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	DGP96	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:	50Hz	
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:	103mm	75mm
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

