

Select your function level

	Single function	Dual function	Extended	Full function
Measured value	Single setpoint and/or major failure reaction (phase sequence or loss)	Dual setpoints, adjustable delay, TRMS, other functions	Dual setpoints, dual delays, 2 outputs, extended functions	Digital setting, dual measurements, 10 setpoints, 2 outputs, NFC
25 50 75 0,,,,,,,100 A A	DIA01 DIA53* PIA01	DIBO1 PIBO1 DIBO2 PIBO2 DIB71*	DICO1 PICO1	
0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	DUA01 DUA52* PUA01 DUA55*	DUB01 DUB02 PUB01 DUB03 PUB02 DUB71* PUB03 DUB72*	DUC01 PUC01	
3-phase	DPA01 DPA02 PPA02 PPA02 PPA03 PPA03 DPA51* DPA52* DPA53* DPA55*	DPB01 DPB02 DPB51* DPB52* PPB02	DPC01 PPC01 DPC02 DPC71* PPC71	
→ MM Frequency		DFB01 PFB01	DFC01	DPD
Thermistor	DTA04 DTA71* PTA01 DTA72* PTA02			
Power & Power factor	DWA01 PWA01	DWB01 PWB01 DWB02 PWB02 DWB03 PWB03		
Pump alternating relays	DLA71* DLA73*			

Current transformers for monitoring relays



100, 500 AAC







MI: 1-phase AC current MP3: 3-phase AC current A82: True RMS AC current E83: Small AC current

transformers for 5, 20, transformers for 5, 20, 100 metering transformer for 25, metering transformer with 7 50, 100, 250 or 500 AAC knob selectable ranges

* DIN 43880, low profile DIN rail Housing

CARLO GAVAZZI
Automation Components







Monitoring relays

Monitoring relays



The 3-phase multifunction monitoring relay is plug & play customizable by NFC



Due to the low profile DIN housing, DPA52, DPB52 and DUB72 are suitable for installation into electric distribution panels as well as industrial cabinets.



DTA motor thermistor relays are useful in all applications where overloads are frequent and may cause motor damage

The wide range of Carlo Gavazzi monitoring relays features 7 different families depending on the type of electric measurement to be monitored: 3-phase, Voltage, Current, Frequency, Power, Power factor, Temperature

Most of them are available in 3 different housings:

- the plug-in housing, with undecal socket
- the Mini-DIN housing, according to DIN 43880, for electric distribution panel installations.

DPD series: the 3-phase multifunction monitoring relay with NFC communication

This 3-phase voltage and frequency monitoring relay provides utmost flexibility in very compact dimensions, as it offers a wide range of features in just 22.5 mm.

The DPD comes with 2 different factory default settings and if they are not appropriate for the application, they can be modified through an App via smartphone or PC and uploaded into the DPD by means of its NFC communication.

DPA52 and DPB52, 3-phase monitoring relays for increased protection

The main purpose of the new 3-phase monitoring relays DPA52 and DPB52 is to protect loads from wrong phase sequence and phase loss. The DPB52 additionally provides protection against over voltage and under voltage.

One of the most important advantages of these relays is the switch mode power supply, which filters and minimizes any harmonic distortions.

DUB72, the double under voltage monitoring relays for hazardous environments

The main advantages of this monitoring relay are the presence of 2 set levels and 2 outputs, which allow the use of one as a pre-alarm and the second as an alarm.

Thanks to the high powered electromechanical 20 A relay, the second threshold/relay can be used to directly disconnect the battery or load.

DTA series, motor thermistor relays, renewed

These thermistor relays protect electric motors from overheating, ensuring continuous production and preventing machine downtime.

They can be supplied with any voltage from 24 V to 240 V either AC or DC with two Normally Open NEMA B300 rated, or two SPDT relay outputs.

Configurations ae for as auto or manual reset for the DTA04 and DTA72. The DTA71 is only auto.

The DTA71 and DTA72 come with DIN 43880 housing, hence they are also suitable for distribution boxes and panels, typical

in domestic and industrial building installations. The unique "Ready for reset" function is available in all our DTA thermistor relays.

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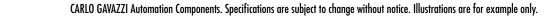
Automation Components





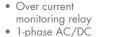
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Current monitoring relays





- Direct input ≤ 5 A or external CT
- 1 setpoint, hysteresis 1 relay output

DIB02 / PIB02

Over or under current

1-phase AC/DC TRMS

CT or Shunt input

Hysteresis, delay

1 relay output

PIAO1, Plug-in terminals

1 transistor output

DIA01, DIN rail housing DIN rail housing

Current monitoring relays

Hall sensing hole 12 mm

Over current

1-phase AC

Self supplied

100 A

1 set-point

monitorina relav

DICO1 / PICO1

Process signals

1÷10 V

AC/DC: 0.5-5 mA,

2-20 mA. 0.1÷1 V.

DC: -5 to +5 V, -20

+1 V, -10 to 10 V

PIBO2, plug-in terminals PICO1, plug-in terminals PFBO1, plug-in terminals

2 relay outputs

DIN rail housing

hysteresis

1 relay output

DFB01 / PFB01

1-phase AC input

Over / under frequency

24 to 240 V, 50/60 Hz

Programmable latching

Adjustable delay

SPDT relay output

or inhibit

mA to +20 mA, -1 to • Self supplied

DIBO2, DIN rail housing DICO1, DIN rail housing DFB01, DIN rail housing DIN rail housing

DIB71

Frequency monitoring relays

DFC01

1-phase AC input

2 Adjustable delay

latching or inhibit

2 SPDT relay output

Programmable

Self supplied

24 to 240 V, 50/60 Hz

Over and under



DIBO1 / PIBO1

- or CT Input Versions from 20 A to
 Adjustable delay and Adjustable delay and ≤ 100 A
 - hysteresis 1 relay output

 - PIBO1, Plug-in terminals

DIB01 100A

- Over or under current
 Over or under current
 Over or under current
 - Hall sensing hole 12 mm

 - DIBO1, DIN rail housing DIN rail housing

1-phase AC/DC TRMS • 1-phase AC/DC TRMS • 1-phase AC TRMS Direct reading ≤ 5 A
 Direct reading ≤ 10 A
 Hysteresis, Delay

Level manag.

relays

DLA71 / DLA73

For 2 or 3 pumps

sequential mode

Automatic rotation of

managed by one

independent input

contact (DLA73)

Differential or

the pumps

Output relay

DIN rail housing

Pump alternating relay

- - relay outputs (DPAO1) (DPA71) DPA01, DIN rail housing DIN rail housing

Monitoring relays

3-phase monitoring relays

DPA52

3-phase Delta mains

Phase sequence and

Switch mode power

SPDT relay ouput

DIN rail housing

3-phase monitoring relays

DPB01 / PPB01

mains

voltaae

3-phase Delta or Star

Phase sequence and

Over and under

Adjustable delay

SPDT relay output

PPBO1, plug-in terminals

Self powered



• 1 SPDT or 2 SPDT • 2 SPDT relay outputs

DPA01 / PPA01

3-phase Delta mains

Up to 690 V mains

Phase sequence and

Self powered

• 1 SPDT (PPAO1)

PPAO1, Plug-in terminals

DPA02 / PPA02

3-phase Delta mains

monitoring +/-15%

PPAO2, plug-in terminals

SPDT relay output

Phase sequence

Supply voltage

Self powered



DPA5I / DPA71

Self powered

(DPA51)

SPDT relay output

DPA03 / PPA03

3-phase Delta mains

Phase sequence and

Adjustable under

SPDT relay ouput

(DPAO3 only)

Up to 690 V mains

DPA02, DIN rail housing DPA03, DIN rail housing DPB01, DIN rail housing

PPAO3, plug-in terminals

Self powered

3-phase Delta mains

Phase sequence and









DPA55

- Solid or split-core
 3-phase Delta mains for cable or 3-phase • Phase sequence and
 - Over and under voltage
- Adjustable under Voltage window monitoring
- voltage Self powered SPDT relay ouput
- DIN rail housing

DPB02 / PPB02

mains

and delay

Self powered

SPDT relay output

DPB02. DIN rail housina

PPB02, plug-in terminals

3-phase Delta or Star

Phase sequence and

Adjustable asymmetry

Phase sequence and

DPA53

Delta mains

 Phase sequence and Adjustable over / under voltage and

DPB52

3-phase Delta mains

Switch mode power

5A SPDT relay output

delay ON

DIN rail housing

- Self powered SPDT relay output

DIN rail housing

Monitoring relays

3-phase monitoring relays



DPC01 / PPC01

mains

2 setpoints and

Self powered

(DPC01)

(DPC01)

adiustable delay

Up to 690 V mains

• 400 Hz versions



mains

voltage

Self powered

3-phase Delta or Star
 3-phase Delta or Star

Asymmetry or tolerance
 Phase sequence and

DPC01, DIN rail housing DPC71, DIN rail housing

PPC01, Plug-in terminals PPC71, Plug-in terminals

Phase sequence and
 Over and under

• 2 SPDT relay outputs • 2 SPDT outputs

DPC71 / PPC71

Asymmetry or tolerance





DPC02

loss

voltage

3-phase Delta and

Up to 690 V mains

Phase sequence and

Star mains

Over and under

Over and under

frequency

Self powered

DIN rail housing

2 SPDT relay output





DPD







3-phase Delta and

frequency over/

under, asymmetry,

phase and neutral

Standard configuration,

customizable NFC

loss, phase sequence.

Star mains

Voltage and

• AC/DC 1-phase over • DC 1-phase under

DUA01 / PUA01

- From 0.4 V to 500 V Adjustable hysteresis Programmable
- SPDT relay output
- 2 setpoints and delay
 Two SPDT relay DUA01, DIN rail housing • From 208 to 480 VAC DIN rail housing PUA01, plug-in terminals • +/-10% or +/-15%
 - Up to 400 Hz

DIN rail housing

Monitoring relays

Voltage monitoring relays



DUA52

DUA55

AC 1-phase.

From 8 to 58 VDC

Adjustable voltage

and hysteresis

SPDT relay output

tolerance monitoring. Self powered

Voltage monitoring relays

DUB03 / PUB03

selectable

Adjustable over or

Adjustable delay and

latching or inhibit

SPDT relay output

under voltage

hysteresis

Programmable

SPDT relay output

DIN rail housing



DUB71

0.1 to 500 VDC/AC

Adjustable hysteresis

Over or under

and delay

Programmable

latching or inhibit

SPDT relay output

voltage





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DUB01 / PUB01 DUB02 /PUB02

- 0.1 to 500 VDC/AC
 24, 115 or 230 VAC 1-phase
- selectable Over or under Adjustable over or
- under voltage voltage Adjustable hysteresis Adjustable delay and delay
 - Programmable
- SPDT relay output
 - latching or inhibit
 - SPDT relay output
- DUB01, DIN rail housing DUB02, DIN rail housing

Motor thermistor relays

PUBO1, plug-in terminals PUBO2, plug-in terminals

Power monitoring relays





Adjustable setpoint

Manual start/stop

Direct reading or

through ext. CT

SPDT relay output





1 or 3-phase active

power monitoring

Over and under power

latching or inhibit

Separate power ON

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SPDT relay output

and alarm ON delays

Automatic/manual

Direct current or CT

reading input

Programmable

start/stop



DWB03 / PWB03

• 1 or 3-phase active

nower monitoring

Direct current or CT

Over and under power

Power direction setting

latching or inhibit

Automatic/manual

Separate power ON

and alarm ON delays

SPDT relay output

Programmable

reading input





Dual under voltage

24Vdc power supply:

range from 15 VDC

Measured range from

16 VDC to 26 VDC

Class I Division 2

of the ISA12.12.1

installation norm

2 SPDT relay outputs

approved

DIN rail housing

hazardous location

monitoring

to 30 VDC

DUB72



24, 48, 115 or 230 VAC
 2 to 500 VDC/AC

PUBO3, Plug-in terminals PUCO1, Plug-in terminals

Over and under

setpoints Adjustable hysteresis

2 voltage and delay

• 2 SPDT relay outputs **DTA72**



Auto reset

Universal supply

Test button

No setting



DTA04

- Up to 6 PTCs input Up to 6 PTCs input Auto or Manual reset configuration
- Test button No setting available SPDT relay output
 - Two Normally Open relays NEMA B300 8A @ 250 VAC outputs
- 2 SPDT relay outputs Universal power supply from 24 V to Up to 6 PTCs input

DIN rail housing

- 240 VAC/VDC Manual / Auto reset
- 2 SPDT relay output DUB03 DIN rail housing DUC01, DIN rail housing • Universal supply

DIN rail housing







- 1 or 3-phase Cos φ 3-phase load guard Up to 690 V monitoring Over and under Cos φ
- Over or under Cos φ Adjustable setpoint Self powered
- under voltage
- SPDT relay output DIN rail housing

DPB51

- 3-phase Delta mains Phase sequence,
- neutral and phase Adjustable over and
- Adjustable delay Self powered

Direct reading or

through ext. CT

SPDT relay output

DWA01, DIN rail housing DWB01, DIN rail housing DWB02, DIN rail housing DWB03, DIN rail housing PWA01, Plug-in terminals PWB01, Plug-in terminals PWB02, Plug-in terminals PWB03, Plug-in terminals