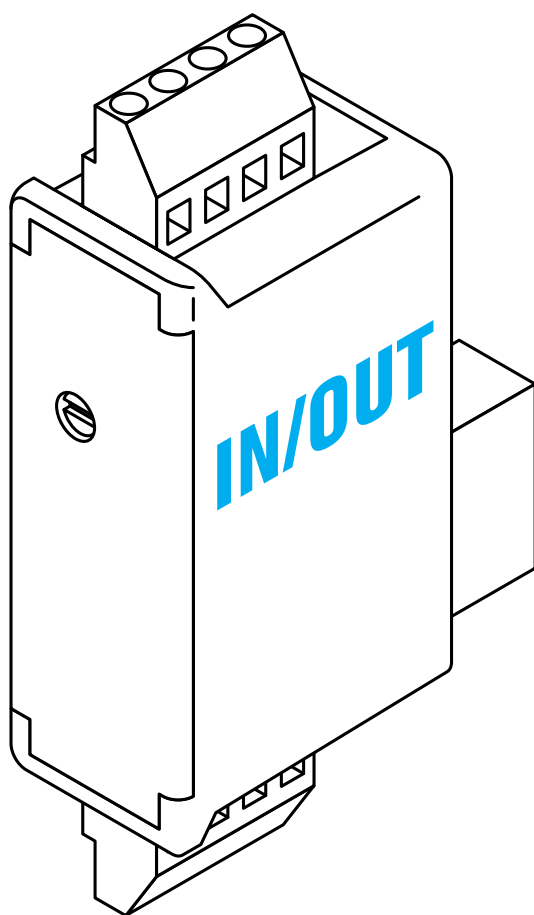


DIRIS Ap

2 Inputs / 2 Outputs



F

GB

D

I

NL

E

P



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Systèmes de Coupure et de Protection
Industrial Switching and Protection Systems

PRELIMINARY OPERATIONS

NB:

For personnel and product safety please read the contents of these operating instructions carefully before connecting.

Check the following points as soon as you receive the Diris Ap package:

- the packing is in good condition,
- the product has not been damaged during transit,
- the product reference number conforms to your order,

- the package contains the product fitted with 2 pull-out terminal blocks,
- operating instructions.

GENERAL INFORMATION

FUNCTIONS

This module provides 2 inputs for pulse metering (metering checking) and 2 outputs for monitoring or control by means of the RS 485.

For the monitoring function, programming of an upper and lower threshold, of the hysteresis, of the time delay and of the run mode for 3I, 3U, 3V, In, ΣP , ΣQ , ΣS , F and $\Sigma FP^{L/C}$, thd 3I, thd 3U, thd 3V, thd In, time.

Possibility of installing up to 3 modules, that is 6 inputs / 6 outputs. Of the 6 outputs, only 2 can be configured for monitoring and of the 6 inputs, only 2 are accessible from the front panel (E1 and E2). This module provides instant storage of min/max values for the 3U, 3F, In, $\pm \Sigma P$, $\pm \Sigma Q$, ΣPF , F, thd 3U, thd 3I and thd In via the RS 485

INSTALLATION

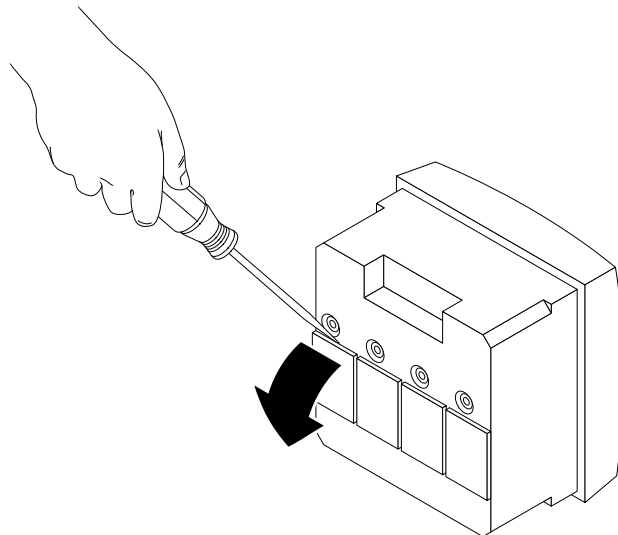
The module is fitted onto the back of the DIRIS Ap in one of the 4 positions provided.

CONNECTION

 **The DIRIS Ap must be switched off**

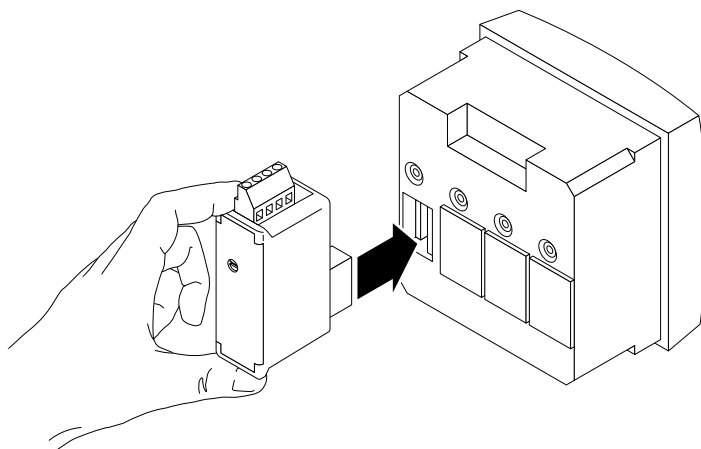
1

DIRIS 342 A



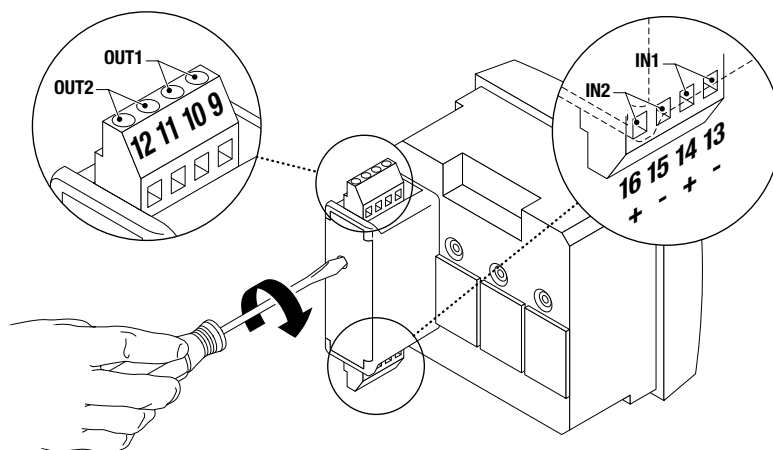
- 2** Fix the module in one of the four positions.

DIRS 343 A



- 3**

DIRS 433 B

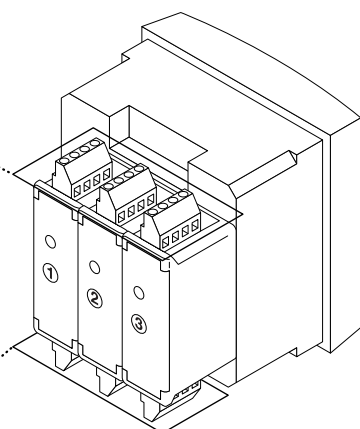


- 4** When using 2 or 3 modules, the modules must be installed as shown.

	9	10	11	12
①	OUT 1		OUT 2	
②	OUT 3		OUT 4	
③	OUT 5		OUT 6	

	13	14	15	16
①	IN 1		IN 2	
②	IN 3		IN 4	
③	IN 5		IN 6	

DIRS 454 A



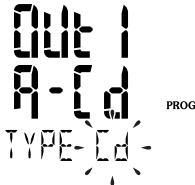
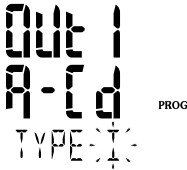
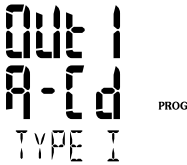
- 5** Follow indications when connecting the terminal.
Switch on voltage supply.

PROGRAMMING

1

PROGRAMMING OF N° 1 RELAY OUTPUT TYPE (OUT 1 A-Cd TYPE)

NB: The type default is allocated to control (Cd). If you want this type, press ▼. You will pass to number 2 relay output type programming (OUT 2 A-Cd TYPE). If not, proceed as follows:

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press once		To display flashing Cd
	Press once		Press again for: In, U, V, ΣP, -ΣP, ΣQ, -ΣQ, ΣS, F, LPF, CPF, THD I, THIN, THD U, THD V, TIME, Cd, I
or			
	Press once		Press again for: THD V, THD U, THIN, THD I, CPF, LPF, F, ΣS, -ΣQ, ΣQ, -ΣP, ΣP, U, V, In, I, Cd, TIME
	Press once		Confirm type. Press on ▼ to programme upper threshold (OUT 1 Ht)

NB: THD I, THIN, THD U and THDV are present if the harmonics module is installed.

2 PROGRAMMING OF N° 1 OUTPUT RELAY UPPER THRESHOLD (OUT 1 Ht)

NB: The default value is at 0 A (1000/A). If you want this value, press on ▼. You will pass to lower threshold programming (OUT 1 Lt). If not, proceed as follows:

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press once		Press as many times as necessary to move to the right or on ◀ to move to the left

Press on ▼ to decrement or on ▲ to increment selected digit value.
 Press once on  to confirm value.
 Press once on ▼ to pass to lower threshold programming (Lt).

NB: the first three digits correspond to the upper threshold value in decimals and the last one corresponds to the weight /, K (kilo) or M (Mega).

Example: programming of 100 kA once entered in the OUT 1 Ht menu.

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press twice		To display flashing 2 nd digit
	Press once		To increment the 2 nd digit
	Press thrice		To display flashing 5 th digit
	Press once		Press again for: / and K
	Press once		To confirm value. Press on ▼ to programme lower threshold (OUT 1 Lt)

3 PROGRAMMING OF N° 1 OUTPUT RELAY LOWER THRESHOLD (OUT 1 Lt)

NB: The default value is at 0 A (1000/A). If you want this value, press on ▼. You will pass to the hysteresis programming (OUT 1 HYST). If not, proceed as follows:

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press once		Press as many times as necessary to move to the right or on ◀ to move to the left
Press on ▼ to decrement or on ▲ to increment selected digit value. Press once on  to confirm value. Press once on ▼ to pass to the hysteresis programming (HYST).			

NB: the first three digits correspond to the lower threshold value in decimals and the last one corresponds to the weight /, K (kilo) or M (Mega).

Example: programming of 10 kA once entered in the OUT 1 Lt menu.

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press thrice		To display flashing 3 rd digit
	Press once		To increment the 3 rd digit
	Press twice		To display flashing 5 th digit
	Press once		Press again for: / and K
	Press once		To confirm the value. Press on ▼ to pass to low threshold (OUT 1 Lt)

4 PROGRAMMING OF N° 1 OUTPUT RELAY HYSTERESIS (OUT 1 HYST)

NB: The default value is at 0 %. If you want this value, press on ▼. You will pass to 1 relay time delay programming (OUT 1 TEMPO). If not, proceed as follow:

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press once	Out 1 PROG HYST 00	Press as many times as necessary to move to the right or on ◀ to move to the left
Press on ▼ to decrement or on ▲ to increment selected digit value. Press once on  to confirm value. Press once on ▼ to pass to time delay programming (TEMPO).			

NB: hysteresis from 0 to 99 %.

Example: programming of 20 % once entered in the OUT 1 HYST menu.

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press once	Out 1 PROG HYST:00	To display flashing 1 st digit.
	Press twice	Out 1 PROG HYST:20	To increment the 1 st digit
	Press once	Out 1 PROG HYST 20	To confirm value. Press on ▼ to programme relay time delay (OUT 1 TEMPO)

5 PROGRAMMING OF N° 1 OUTPUT RELAY TIME DELAY (OUT 1 TEMPO)

NB: The default value setting is at 0 second. If you want this value, press on ▼. You will pass to relay run mode programming (OUT 1 RELAY). If not, proceed as follows:

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press once		Press as many times as necessary to move to the right or on ◀ to move to the left
Press on ▼ to decrement or on ▲ to increment selected digit value. Press once on  to confirm value. Press once on ▼ to pass to relay run mode programming (RELAY).			

NB: time delay from 0 to 999 seconds.

Example: programming of 30 seconds once entered in the OUT 1 TEMPO menu.

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press twice		To display flashing 2 nd digit
	Press thrice		To increment the 2 nd digit
	Press once		To confirm value. Press ▼ to programme the relay run mode (RELAY)

6 PROGRAMMING OF N° 1 OUTPUT RELAY RUN MODE (OUT 1 RELAY)

NB: The run mode default setting is NO (Normally open). If you want this value, press on ▼. You will pass to number 2 relay output programming (OUT 1 Lt). If not, proceed as follows:

KEYS	INSTRUCTIONS	DISPLAY	COMMENT
	Press once		To display flashing NO (Normally open)



Press once

Out 1
A-Cd
RELAY-NC
PROG

Press again for: NO and NC (Normally closed)



Press once

Out 1
RELAY NC
PROG

Confirm run mode.
Press ▼ to programme the 2 relay output type (Out 2 A-Cd)

7 PROGRAMMING OF N° 2 OUTPUT RELAY (OUT 1 A-Cd)

Proceed as for number 1 relay output. If you do not wish to use it, press six times on ▼ to return to network programming (Net) or press for 3 seconds on **PROG** to quit programming.

TECHNICAL CHARACTERISTICS

RELAY OUTPUTS

Relay	230 V AC – 5 A – 1150 VA
N° of operations	$\leq 10^5$
Galvanic insulation	2.5 kV

OPTOCOUPLER INPUTS

Max. direct voltage	30 V DC
Min. direct voltage	10 V DC
Max. inverse voltage	30 V DC
Galvanic insulation	3 kV
Min. pulse duration	10 ms
Max number of operations	10^8

**SIEGE SOCIAL
HEAD OFFICE**

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Industrial Switching and Protection Systems

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