

Interface Card

with integrated protective circuit and manual overrides with LED display

Type IC-...

These cards, which conform to DIN 41494 for European standard racks, are used as multiple E.P. converters. Each card contains a 32 pin electrical terminal strip, as per DIN 41612, together with 27 pneumatic connectors for pneumatic multiple connection.

The fitted components are connected through to the card connectors via integrated channels. Thus many components can be accommodated in the minimum of space.

For examples of activation circuits, see sheet 9.920.2.

Accessories:

Pneumatic multiple connector and electrical terminal strip for installation in Euro-standard racks to DIN 41494.

The pneumatic multiple connector for the PH and TH design is an essential accessory

Order codes:

15 168 ICP-27-PK-3
for 3 mm plastic tubing
15 169 ICP-11-PK-3-2-PK-6
for 6 mm plastic tubing (R, P), 3 mm (A)

With air supply shut-off:

Order codes:
15 171 ICP-27-PK-3-K
for 3 mm plastic tubing
15 173 ICP-27-PK-4-K
for 4 mm plastic tubing

Electrical terminal strip for PH and TH, positive switching design

Order code:
15 174 ICP-24-P-FLK
for TH, negative switching design
15 169 ICP-11-PK-3-2-PK-6
Order code:
15 175 ICP-24 M-FLK



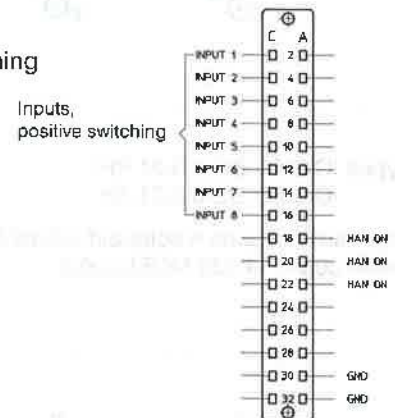
The interface card is available in 2 designs

PH design:

Electrical inputs: 24 V, positive switching

MAN/ON = inputs
positive switching
optional

GND = 0 V optional



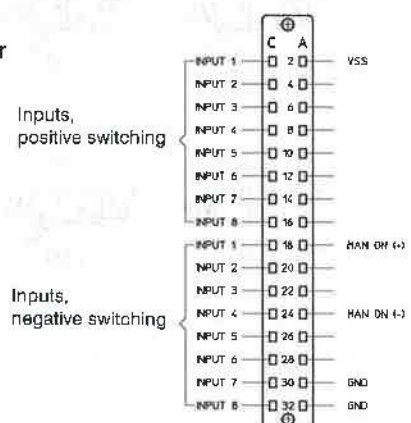
TH model:

Electrical inputs: 5 to 24 V, positive or negative switching, TTL compatible

VSS = Mains voltage

GND = 0 V optional

MAN/ON = Mains voltage
for manual
auxiliary
activation



Order code	Part No./Type	13 798	15 147	14 021
		IC-8M 3/2-0.9-24 PH	IC-8MO 3/2-0.9-24 PH	IC-8M 3/2-2.0-24 PH
		14 024	15 148	14 022
		IC-8M 3/2-0.9-24 TH	IC-8MO 3/2-0.9-24 TH	IC-8M 3/2-2.0-24 TH
Medium		Compressed air, 5 µm filtered (lubricated), or vacuum		
Design		Multi-EP converter as plug-in card		
Mounting		European-standard rack to DIN 41494, part 5		
Connection	pneumatic	Multiple plug-in coupling (27 fold) for pneumatic multiple connector		
	electrical	Terminal strip to DIN 41612, design D, 32 pin		
Pressure range	normally closed*	- 0.9 - 6 bar	-	- 0.9 to 6 bar
	normally open**	- 0.9 - 3 bar	- 0.9 to 6 bar	- 0.9 to 6 bar
	pilot control valves	-	-	4 to 6 bar (connector 10)
Nominal bore		0.9 mm		2.0 mm
Standard nominal flow rate		20 l/min		80 l/min
Switching time	On/Off	30/50 ms	46/33 ms	19/55 ms
Temperature range		0 to +50 °C		
Operating voltage	PH/TH	24 V DC/5 to 24 V DC		
Residual ripple	TH	10%		
Power consumption		1.44 W		
Current consumption		max. 85 mA par input		
Duty cycle		100%		
Degree of protection to DIN 40050		IP 00		

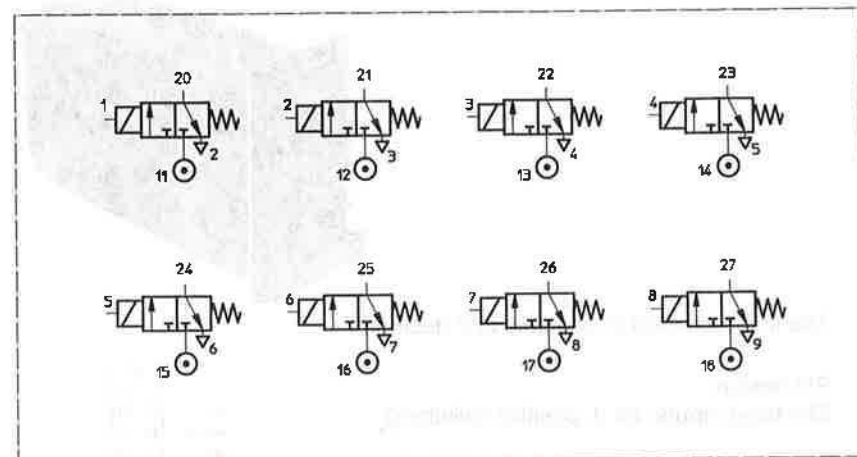
** By interchanging P and R functions, normally open operation is obtained: Connection P: 2, 3, 4, 5, 6, 7, 8, 9; * Connection P: 11, 12, 13, 14, 15, 16, 17, 18.

Types IC-8M 3/2-0.9-24 PH
IC-8M 3/2-0.9-24 TH

This card contains 8 solenoid valves Type MEL-3-0.9
Order code: 14 543 MEL-3-0.9

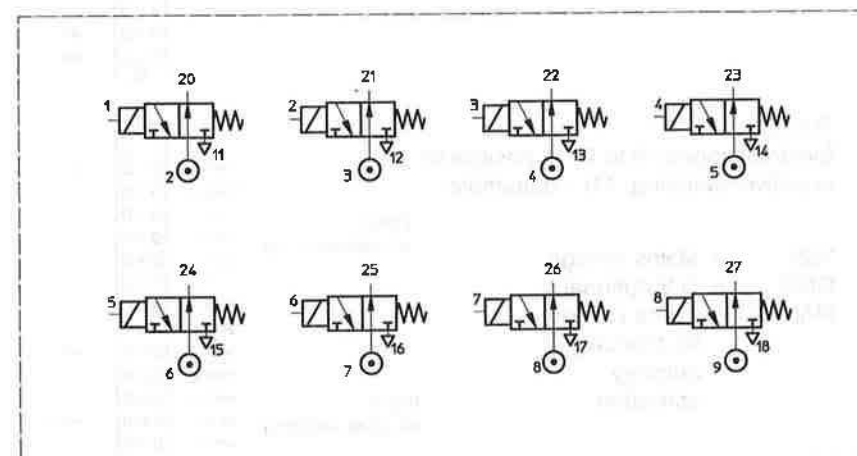
R = Exhaust
P = Compressed air
connection
A = Pneumatic output
signal

Allocation: Electrical connections Pneumatic connections



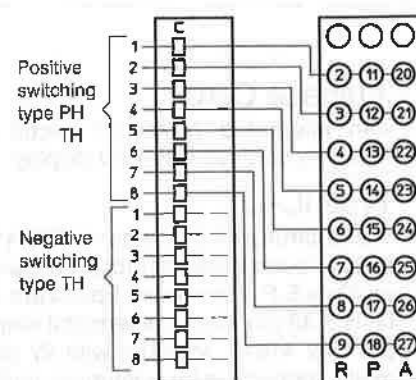
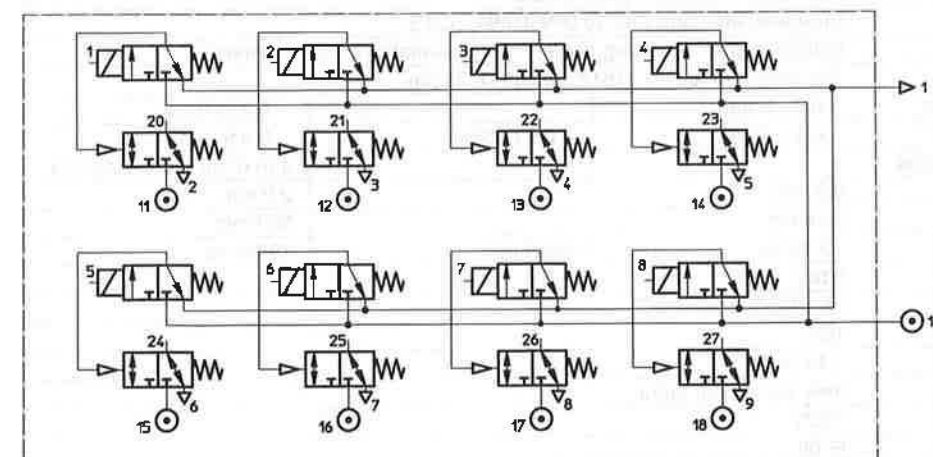
Types IC-8MO 3/2-0.9-24 PH
IC-8MO 3/2-0.9-24 TH

This card contains 8 solenoid valves MOEL-3-0.9
Order code: 14 025 MOEL-3-0.9

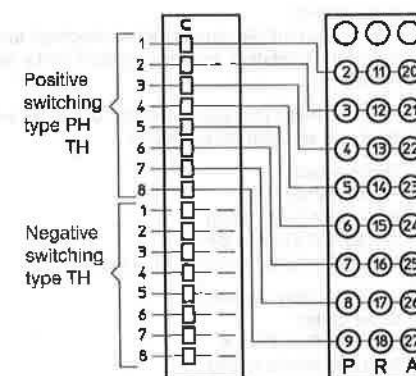


Types IC-8M 3/2-2.0-24 PH
IC-8M 3/2-2.0-24 TH

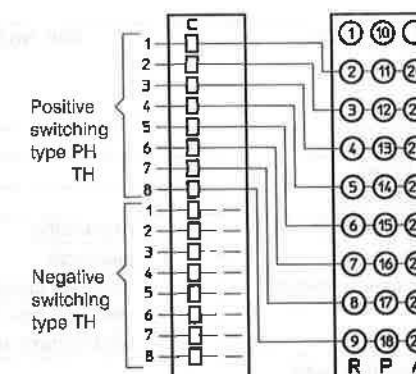
This card contains 8 solenoid valves MEL-3-0.9
and 8 pneumatic valves, type VL/0-3-2.0
Order code: 14 765 VL/0-3-2.0



Electrical Inputs	A	P	R
Input 1 activated	20	11	2
Input 2 activated	21	12	3
Input 3 activated	22	13	4
Input 4 activated	23	14	5
Input 5 activated	24	15	6
Input 6 activated	25	16	7
Input 7 activated	26	17	8
Input 8 activated	27	18	9



Electrical Inputs	A	P	R
Input 1 not activated	20	2	11
Input 2 not activated	21	3	12
Input 3 not activated	22	4	13
Input 4 not activated	23	5	14
Input 5 not activated	24	6	15
Input 6 not activated	25	7	16
Input 7 not activated	26	8	17
Input 8 not activated	27	9	18



Electrical Inputs	A	P	R
Input 1 activated	20	11	2
Input 2 activated	21	12	3
Input 3 activated	22	13	4
Input 4 activated	23	14	5
Input 5 activated	24	15	6
Input 6 activated	25	16	7
Input 7 activated	26	17	8
Input 8 activated	27	18	9

Interface Card

with integrated protective circuit and manual overrides with LED display

Type IC-...

These cards, which conform to DIN 41494 for European standard racks, are used as multiple E.P. converters. Each card contains a 32 pin electrical terminal strip, as per DIN 41612, together with 27 pneumatic connectors for pneumatic multiple connection.

The fitted components are connected through to the card connectors via integrated channels. Thus many components can be accommodated in the minimum of space.

For examples of activation circuits, see sheet 9.920.2.

Accessories:

Pneumatic multiple connector and electrical terminal strip for installation in Euro-standard racks to DIN 41494.

The pneumatic multiple connector for the PH and TH design is an essential accessory

Order codes:

15 168 ICP-27-PK-3
for 3 mm plastic tubing
15 169 ICP-11-PK-3-2-PK-6
for 6 mm plastic tubing (R, P), 3 mm (A)
not for type IC-8M 4/2-...

With air supply shut-off:

Order codes:

15 171 ICP-27-PK-3-K
for 3 mm plastic tubing
15 173 ICP-27-PK-4-K
for 4 mm plastic tubing

Electrical terminal strip for PH and TH, positive switching design

Order code:

15 174 ICP-24-P-FLK
for TH, negative switching design

Order code:

15 175 ICP-24-M-FLK

IC-8...



IC-4...



The interface card is available in 2 designs

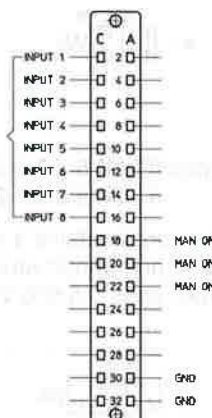
PH design:

Electrical inputs: 24 V, positive switching

MAN/ON = inputs
positive switching
optional

GND = 0 V optional

Inputs,
positive switching



TH model:

Electrical inputs: 5 to 24 V, positive or negative switching, TTL compatible

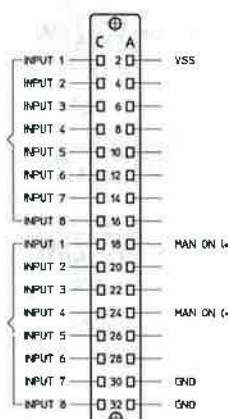
VSS = Mains voltage

GND = 0 V optional

MAN/ON = Mains voltage
for manual
auxiliary
activation

Inputs,
positive switching

Inputs,
negative switching



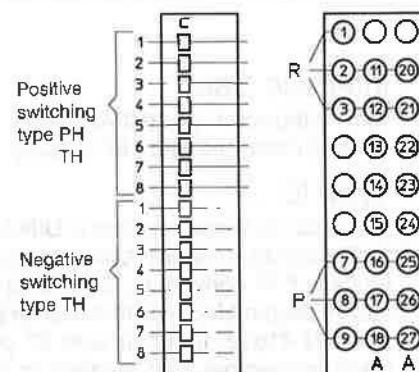
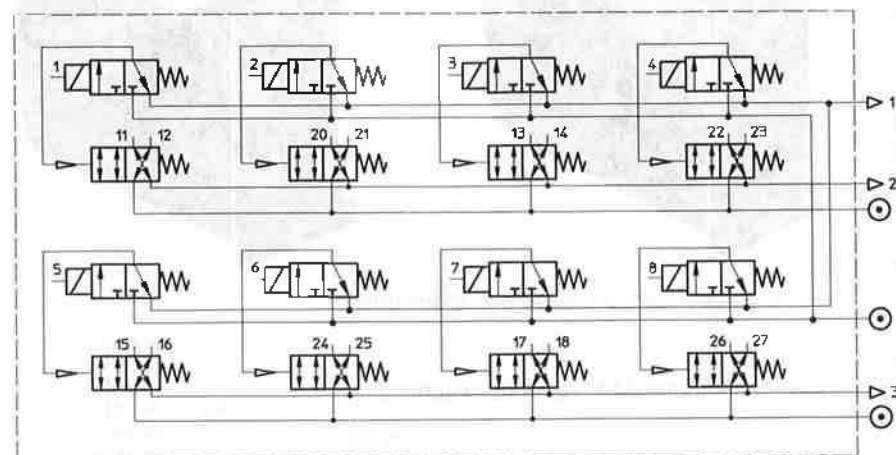
Order code	Part No./Type	15 150 IC-8M 4/2-2.0-24 PH	15 617 IC-4M 5/2-2.0-24 PH	14 023 IC-41 5/2-2.0-24 PH
		15 151 IC-8M 4/2-2.0-24 TH	15 618 IC-4M 5/2-2.0-24 TH	14 020 IC-41 5/2-2.0-24 TH
Medium		Compressed air, 5 µm filtered (lubricated), or vacuum		
Design		Multi-EP converter as plug-in card		
Mounting		European-standard rack to DIN 41494, part 5		
Connection	pneumatic	Multiple plug-in coupling (27 fold) for pneumatic multiple connector		
	electrical	Terminal strip to DIN 41612, design D, 32 pin		
Pressure range	normally closed	- 0.9 - 6 bar (7, 8)	- 0.9 to 6 bar (12, 14, 16, 18)	- 0.9 to 6 bar (12, 14, 16, 18)
	normally open	4 to 6 bar (9)	4 to 6 bar (10)	2 to 6 bar (10)
	pilot control valves	-	-	4 to 6 bar (connector 10)
Nominal bore		2.0 mm		
Standard nominal flow rate		80 l/min		
Switching time	On/Off	30/60 ms		
Temperature range		0 to + 50 °C		
Operating voltage	PH/TH	24 V DC/5 to 24 V DC		
Residual ripple	TH	10%		
Power consumption		1.44 W		
Current consumption		max. 85 mA par input		
Duty cycle		100%		
Degree of protection to DIN 40050		IP 00		

Types IC-8M 4/2-2.0-24 PH
IC-8M 4/2-2.0-24 TH

This card contains 8 solenoid valves MEL-3-0.9
and 9 pneumatic valves VL-4-2.0
Order code: 15 165 VL-4-2.0

R = Exhaust
P = Compressed air
connection
A = Pneumatic output
signal

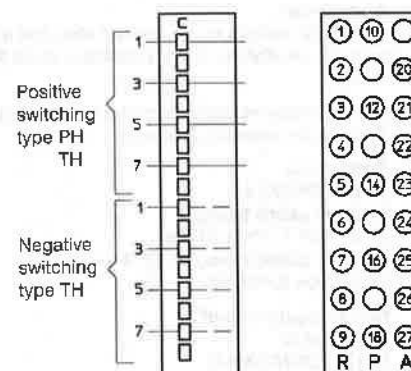
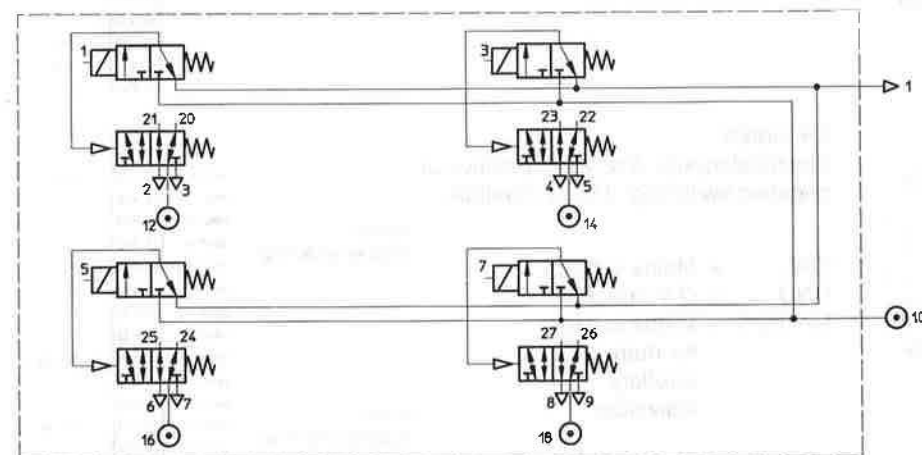
Allocation: Electrical connections Pneumatic connections



Electrical Inputs	A	P	R
Input 1 activated/not activated	11/12	7	2
Input 2 activated/not activated	20/21		
Input 3 activated/not activated	13/14		
Input 4 activated/not activated	22/23		
Input 5 activated/not activated	15/16	8	3
Input 6 activated/not activated	24/25		
Input 7 activated/not activated	17/18		
Input 8 activated/not activated	26/27		

Types IC-4M 5/2-2.0-24 PH
IC-4M 5/2-2.0-24 TH

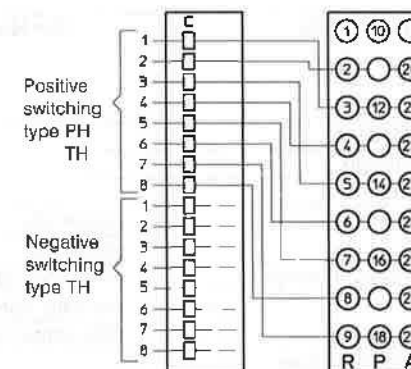
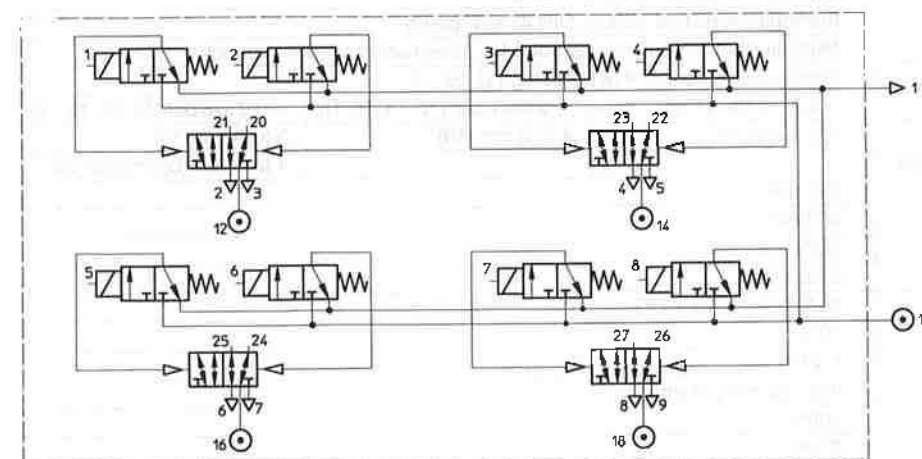
This card contains 4 solenoid valves MEL-3-0.9
and 4 pneumatic valves VL-5-2.0
Order code: 15 616 VL-5-2.0



Electrical Inputs	A	P	R
Input 1 activated/not activated	21/20	12	3/2
Input 3 activated/not activated	23/22	14	5/4
Input 5 activated/not activated	25/24	16	7/6
Input 7 activated/not activated	27/26	18	9/8

Types IC-4J 5/2-2.0-24 PH
IC-4J 5/2-2.0-24 TH

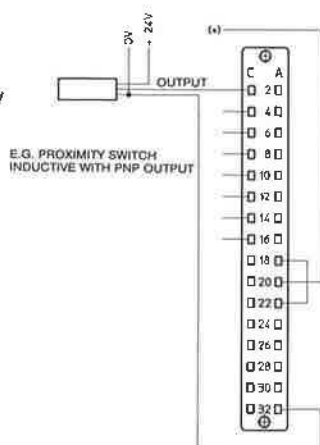
This card contains 8 solenoid valves MEL-3-0.9
and 4 double pilot valves J-5-2.0
Order code: 14 764 J-5-2.0



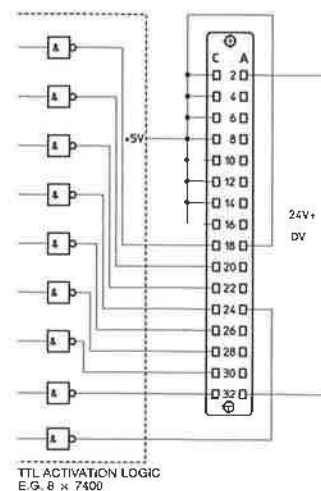
Electrical Inputs	A	P	R
Input 1 activated	21	12	3
Input 2 activated	20		2
Input 3 activated	23	14	5
Input 4 activated	22		4
Input 5 activated	25	16	7
Input 6 activated	24		6
Input 7 activated	27	18	9
Input 8 activated	26		8

PH design
positive switching 24 V

e.g. proximity switch,
inductive with PNP output



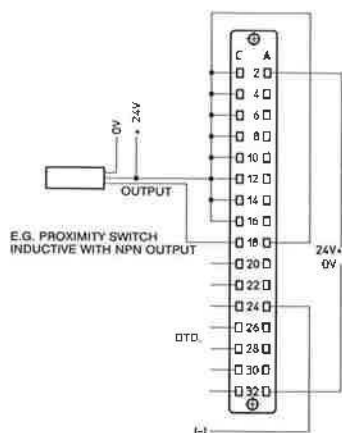
TH design
TTL activation logic



TH design

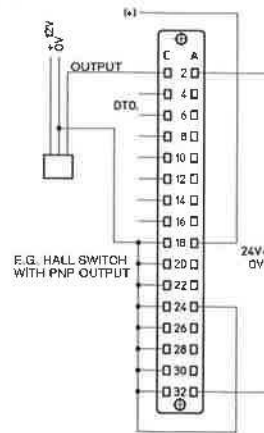
Activation 5 to 24 V
negative switching

e.g. proximity switch,
inductive with NPN output



TH design
Activation 5 to 24 V
positive switching

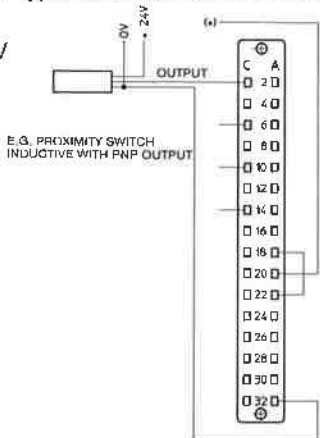
e.g. Hall switch
with PNP output



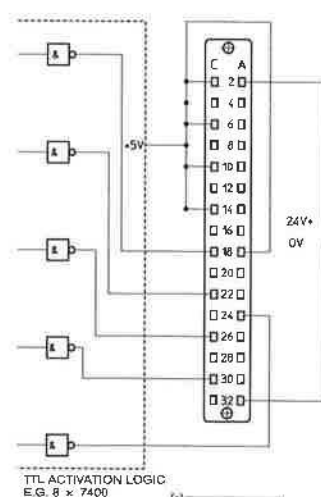
Activating examples for type IC-4M5/2-2.0-24 PH and IC-4M5/2-2.0-24 TH

PH design
positive switching 24 V

e.g. proximity switch,
inductive with PNP output



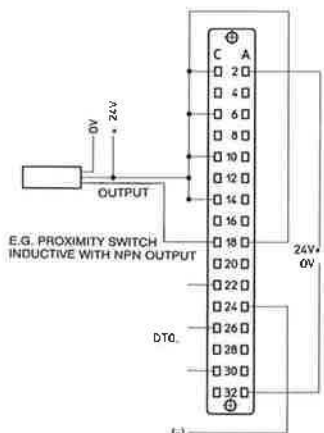
TH design:
TTL activation logic



TH design:

Activation 5 to 24 V
negative switching

e.g. proximity switch,
inductive with NPN output



TH design:
Activation 5 to 24 V
positive switching

e.g. Hall switch
with PNP output

