



DESCRIPTION

Digital output expansion modules. The digital output expansion modules for use with Brodersen fieldbus and telemetry intelligent modules in the Series 2000, 4000 & RTU32 Series.

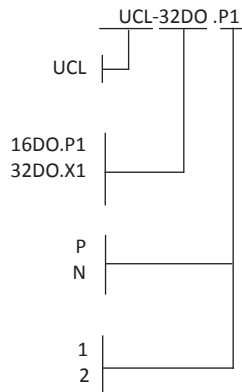
VERSIONS / ORDERING CODES

Type
UCL

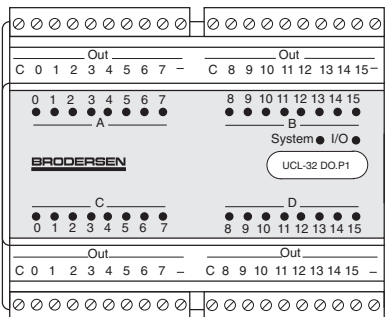
Output
16 digital output
32 digital output

Output Type
PNP
NPN

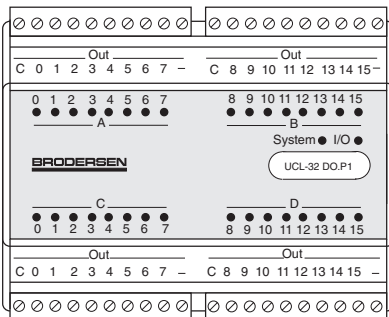
Voltage
10-30 VDC
30-60VDC (only as 32DO NPN type)



UCL-16DO.P1



UCL-32DO.XX





Digital Output Expansion Modules UCL-16DO, UCL-32DO

TECHNICAL DESCRIPTION

Input/output

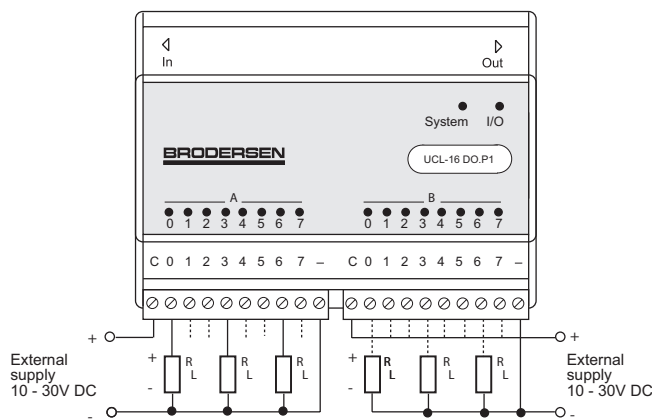
The Expansion I/O modules basic I/O fit can include up to 32 output terminals. Among the options available are:

Version	UCL-	16DO	32DO
Digital outputs (PNP o. c.)		16	32

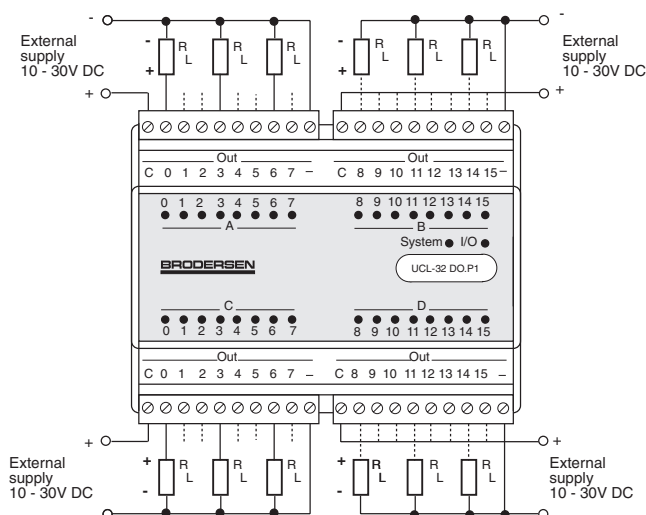
All digital I/O's are equipped with opto-couplers.

Wiring Diagram

UCL-16DO 10-30 VDC example



UCL-32DO 10-30 VDC example.



NOTE

If the module is of type P2 (30-60 VDC) the external supply must be in the range 30-60 VDC

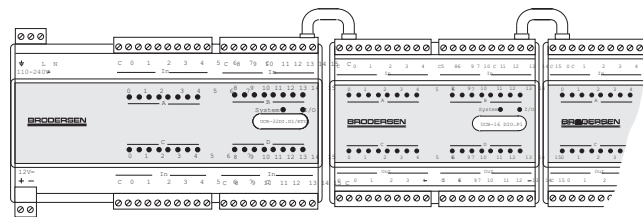
Local bus connections

The I/O expansion module is connected to the intelligent module and additional expansion modules using the local bus connector on the left and right top side of the module. 8 pole RJ connector cable is used. Technical details of the local bus and wiring detail can be ordered from your module supplier. A range of appropriate cables for adding expansion modules is available. Length of local bus cable is max. 50cm.

I/O expansion general

The basic I/O fit of the RTU32 series & series 2000/4000

Example: RTU32S with expansion modules



For other types of I/O modules see. www.brodersen.com under I/O modules

In the event that the current consumption of the expansion modules exceeds the capability of the power supply, an additional power supply must be inserted.



DIGITAL INPUT/OUTPUT

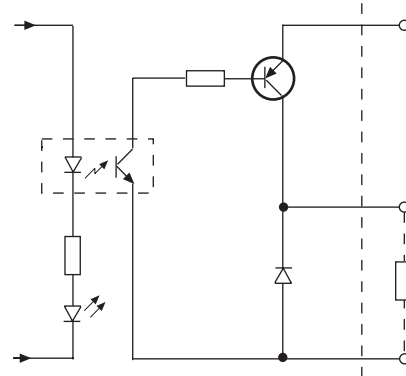
Outputs:	16/32 PNP or 32 NPN open collector. All equipped with optocouplers.
External voltage P1:	10 - 30V DC (note 1).
External voltage P2:	30 - 60V DC (note 1).
Output voltage drop:	Max. 1.5V (output activated).
Output current P1:	Max. 0.5A, max 2A per section of 8
Output current P2:	Max. 0.25A, max 2A per section of 8 outputs.
Output peak current:	Max. 5A in 1 second (note 1).
Output leakage current (off):	Max. 0.5mA.
Output delay:	Max. 1ms.
Isolation:	2kV AC. (electronics to output).
Indicators:	One for each digital output (yellow) indicating active output.

GENERAL

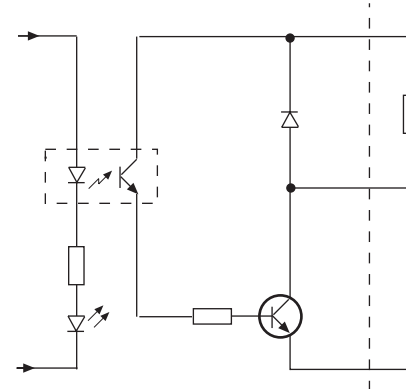
Current consumption (12V) :	
UCL-16DO:	max. 80mA.
UCL-32DO:	max. 170mA.
Ambient temperature:	-10 - +55°C.
EMC:	EN 50081-1/EN50082-2.
Climatic:	
Dry heat:	IEC 68-2-2, Test Bd, Temp. +55°C, Duration 8h.
Cold:	IEC 68-2-1, Test Ad, Temp. -10°C, Duration 8h.
Damp heat:	IEC 68-2-3, Test Ca, Temp. 40°C, RH 95%, Duration 8h.
Mechanical:	
Vibration:	IEC 68-2-6, Test Fc (sinusoidal), Freq. 10-150Hz, Amp. 4g, 5 sweeps in 3 orthogonal axes.
Shock:	IEC 68-2-27 (half sine), Acc. 15g, Pulse time 11msec., 3 x 6 shocks.
Protection:	IP20.
Mounting:	35 mm DIN-rail, EN50022.
Terminals:	Max. 1.5 mm ² wire.
Housing:	Anodized aluminium with plastic ends. According to DIN 43880.
Dimensions:	
HxWxD:	80 (+connectors)x108x62mm

CIRCUIT CONFIGURATION (DIGITAL)

Output PNP



Output NPN



NOTES/REMARKS

- 1) Input signals exceeding the maximum values **MAY CAUSE PERMANENT DAMAGE** to the module.