

SECTION INDEX

FUNCTIONS

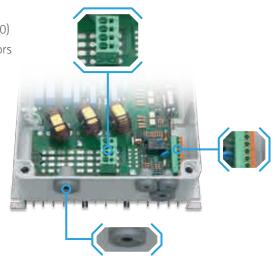
XV300 - three-phase fan speed control 94 Three-phase speed controllers XV308K - XV310K - XV312K XV320K - XV328K - XV340K 95 XV05/10/22/100 - single-phase fan speed control 96 Single-phase speed controllers XV05PD - XV05PK - XV10PK XV22PK - XV105D - XV110K XV150K 97 XV-ACK 98 Accessory

MODELS



XV300 SERIES: THREE-PHASE FAN SPEED CONTROL

- Chopped phase regulators designed for 3-phase fans with adjustable voltage motors
- Designed for adjustable voltage motors from 8 to 40A
- Oversized heat sinks for better heat disposal
- Integrated heat protection
- Oversized power stages
- Optimized radiofrequency filters
- Available with ABS self-extinguishing cover (IP55) or in aluminum (IP20)
- Less time spent for wiring operations thanks to the screwless connectors with useful cable protectors
- On board 0÷10V output to be used for testing operation
- Compatible with Dixell controllers equipped with PWM, 4÷20mA, 0÷10V outputs like the iPro, XC600, XM600, ... series



HOW to ORDER

XV308/312/328/340K

XV310K

XV320K

X	٧	3			K	-	7	0	1	0	0
X	٧	3	1	0	K	-	7	0	0	0	0
X	٧	3	2	0	K	-	7	0	С	0	0



Protection grade

0 = IP20

1 = IP55

XV300

THREE-PHASE SPEED CONTROLLERS

XV308K	Speed controller designed for three-phase A.C. motors up to 5,5kVA, 8A, with input for PWM, $4\div20$ mA or $0\div10$ V, dimension 165x230mm, weight 2,5Kg, power dissipation 30W
XV310K	Speed controller designed for three-phase A.C. motors up to 6,5VA, 10A, with input for PWM, 4÷20mA or 0÷10V, dimension 165x230mm, weight 3Kg, power dissipation 40W
XV312K	Speed controller designed for three-phase A.C. motors up to 8kVA, 12A, with input for PWM, 4÷20mA or 0÷10V, dimension 230x265mm, weight 4Kg, power dissipation 60W
XV320K	Speed controller designed for three-phase A.C. motors up to 13kVA, 20A, with input for PWM, 4÷20mA or 0÷10V, dimension 230x265mm, weight 4,8Kg, power dissipation 80W
XV328K	Speed controller designed for three-phase A.C. motors up to 19kVA, 28A, with input for PWM, 4÷20mA or 0÷10V, dimension 270x340mm, weight 7Kg, power dissipation 120W
XV340K	Speed controller designed for three-phase A.C. motors up to 26kVA, 40A, with input PWM, 4÷20mA or 0÷10V, dimension 270x340mm, weight 9Kg, power dissipation 155W





K: 165x230mm

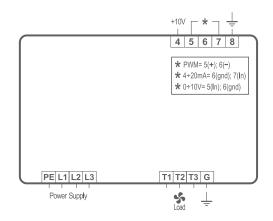
K: 230x265mm



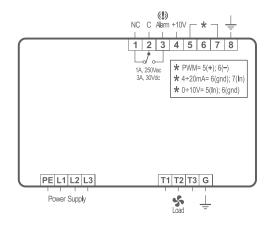
K: 270x340mm

FEATURES	XV308K	XV310K	XV312K	XV320K	XV328K	XV340K
Power supply	400Vac	400Vac	400Vac	400Vac	400Vac	400Vac
Protection grade	IP55	IP20	IP55	IP55, IP20	IP55	IP55
Maximum load	8A	10A	12A	20A	28A	40A
Control input	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V	PWM 4÷20mA 0÷10V
Alarm relay			1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc	1A, 250Vac 3A, 30Vdc
Auxiliary output	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc	10Vdc
Supply LED	pres	pres	pres	pres	pres	pres
Alarm LED	pres	pres	pres	pres	pres	pres
Relay ON LED			pres	pres	pres	pres

XV308K - XV310K



XV312K - XV320K - XV328K - XV340K





XV05/10/22/100 SERIES: SINGLE-PHASE FAN SPEED CONTROL

- Chopped phase speed controllers to control pressure and temperature in refrigerating systems including cooling fans
- Inputs for regulation by temperature and pressure
- Direct or inverse action for condenser or evaporator fans
- Cut off, minimum speed and max speed at start up functions
- Trigger output for managing another module
- Slave models managed by the input signal (for XV100)
- Compatible with Dixell controllers equipped with PWM, 4÷20mA, 0÷1V/0÷10V outputs like the iPro, XC600, XM600, ... series
- 1VA max power absorption
- Measurement range: 0÷100%

HOW to ORDER													
XV05PD	Х	٧	0	5	Р	D	-	5	0	0	0	0	
XV05/10/22PK	Х	٧			Р	K	-	5	0	0	0	0	
XV100	X	٧	1				-	5	В	С	D	0	
В								С					D
Format		Type of action						Regulation input					
O = DIN			D = Direct + Cut Off							N = NTC probe			
5 = Enclosure IP55			R = Inverse + Cut Off							$\mathbf{A} = \text{Current (4} \div 20\text{mA})$			
N = Slave (not for regulation input = N)					$V = 0 \div 1 \text{V} / 0 \div 10 \text{V}$								

SINGLE-PHASE SPEED CONTROLLERS

XV05/10/22

XV05PD XV05PK	Speed controllers designed for single-phase A.C. motors up to 500W, 2A, PWM input
XV10PK	Speed controller designed for single-phase A.C. motors up to 1000W, 4A, PWM input
XV22PK	Speed controller designed for single-phase A.C. motors up to 2200W. 9.5A. PWM input



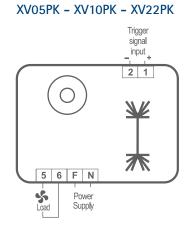


PD: 4 DIN Rail

PK: 80x70mm

FEATURES	XV05PD	XV05PK	XV10PK	XV22PK
Power supply Control input	230Vac PWM	230Vac PWM	230Vac PWM	230Vac PWM
Direct-inverse function Full speed input at start up Trigger signal	pres	pres	pres	pres
Minimum speed function Cut off function				

XV05PD Power Supply 1 3 10 12 Trigger signal input



XV100

SINGLE-PHASE SPEED ADVANCED CONTROLLERS





D: 4 DIN Rail K: 139x158mm



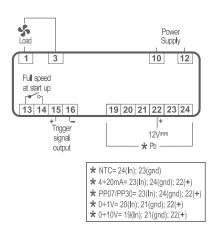
XV105D	Speed controller designed for single-phase A.C. motors up to 500W, With Input for NTC, 4±20MA 0÷1V or 0÷10V
XV110K	Speed controller designed for single-phase A.C. motors up to 1kW, with input for NTC, $4\div20mA$, $0\div1V$ or $0\div10V$
XV150K	Speed controller designed for single-phase A.C. motors up to 5kW, with input for NTC, $4 \div 20mA$, $0 \div 1V$ or $0 \div 10V$



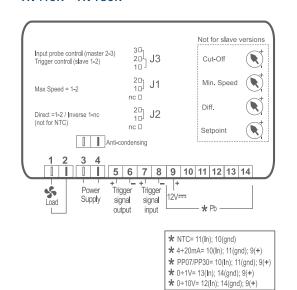
K: 175x200mm

FEATURES	XV105D	XV110K	XV150K	
Power supply	230Vac	230Vac	230Vac	
Control input	NTC 4÷20mA 0÷1V/0÷10V		NTC 4÷20mA 0÷1V/0÷10V	
Direct-inverse function	pres	pres	pres	
Full speed input at start up	pres	pres	pres	
Trigger signal	pres	pres	pres	
Minimum speed function	pres	pres	pres	
Cut off function	pres	pres	pres	

XV105D



XV110K - XV150K



ACCESSORY

Anti-condensing kit for XV110K and XV150K models

- Resistance at 25°C (77°F): 100÷6000hm
- Rated operating voltage: 120Vac or 220Vac
- Max operating voltage: 260Vac
- Steady state current at 25°C (77°F): 12A±30% (120Vac) 9A±30% (220Vac)





TEMPERATURE/HUMIDITY/PRESSURE CONTROLLERS

SECTION INDEX

FUNCTIONS MODELS

XT100 - NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0	XT100 - NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V multi-probe input					
1 stage digital controllers	XT110C – XT110D XT111C – XT111D	101				
2 stage digital controllers	XT120C - XT120D XT121C - XT121D	102				
Neutral zone digital controllers	XT130C - XT130D XT131C - XT131D	103				
2 stage digital controllers (1 PID)	XT141C - XT141D	104				
3 stage digital controller	XT151D	104				
4 stage digital controller	XT160D	104				



XT100 SERIES: NTC, PtC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V MULTI-PROBE INPUT

- Universal controllers to manage temperature, humidity and pressure in both the industrial and commercial applications
- Stock optimization: thanks to the multi-probe inputs
- 1 or 2 stage ON/OFF or PID with direct or reverse action
- Temperature inputs: PTC, NTC, Pt100; thermocouple J, K or S by selecting the parameters
- Pressure or humidity inputs: 4÷20mA, 0÷1V or 0÷10V by selecting the parameters
- Direct line power supply 230 (110) Vac. No external transformer required
- Display with integrated measurement unit (°C/°F/%RH/Bar/PSI)
- Hot Key or Prog Tool Kit connector for quick and easy programming
- Serial connection to monitoring systems
- 3VA max power absorption
- Display with red LED (10,5 mm high) and 5 icons

HOW to ORDER A B C D U XT100 For blue display please contact Dixell В Α C Measurement unit Buzzer Analog output Input Power supply P = PTC (NTC)0 = 12Vac/dc $\boldsymbol{C}={}^{\circ}\boldsymbol{C}$ $\mathbf{0} = No$ No $F = {}^{\circ}F$ 1 = 24 Vac/dcT = PTC (NTC, Pt100, TcJ,TcK, TcS) **1** = Yes No **2** = 24Vac $\mathbf{B} = \mathsf{Bar}$ 4÷20mA $A = 4 \div 20 \text{mA}, 0 \div 1 \text{V}, 0 \div 10 \text{V}$ 2* = No **4** = 110Vac $\mathbf{P} = \mathsf{PSI}$ 4÷20mA $B = PP07 (-0.5 \div 7bar)$ 3* = Yes **5** = 230Vac H = %RH $C = PP30 (0 \div 30bar)$ 4* = No 0÷10V $D = PP11 (-0.5 \div 11bar)$ **N** = No measurement unit **5*** = Yes 0÷10V H = XH10/20P* Only for D format

1 STAGE CONTROLLERS

XT110C XT110D

ON/OFF configurable digital 1 stage controllers

XT111C XT111D

ON/OFF configurable digital 1 stage controllers with alarm relay





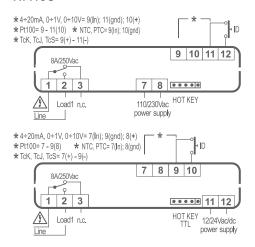
C: 32x74mm

D: 4 DIN Rail

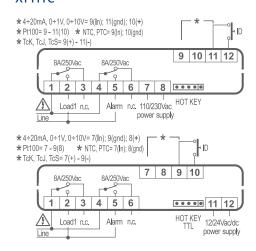
FEATURES	XT110C	XT110D	XT111C	XT111D
Display: n° digits	± 3½ d.p.	± 3½ d.p.	± 3½ d.p.	± 3½ d.p.
Power supply	12, 24Vac/dc 110, 230Vac	24Vac/dc 24, 110, 230Vac	12, 24Vac/dc 110, 230Vac	24Vac/dc 24, 110, 230Vac
Probe inputs				
NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V	config	config	config	config
Relay outputs				
Stage 1 Stage 2 Stage 3 Stage 4	8A	no 8A/nc 5A	8A	no 8A/nc 5A
Alarm			8A	no 8A/nc 5A
Other				
Digital input Hot Key/Prog Tool Kit output Serial output Analog output	pres pres* TTL*	pres pres TTL 4÷20mA, 0÷10V	pres* TIL*	pres pres TTL 4÷20mA, 0÷10V
Buzzer	opt	opt	opt	opt

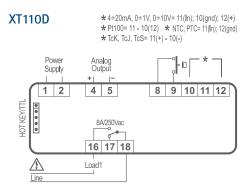
^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

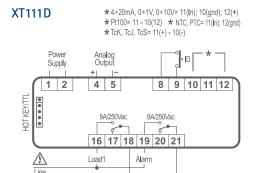
XT110C



XT111C







2 STAGE CONTROLLERS





XT120C XT120D

ON/OFF configurable digital 2 stage controllers

XT121C XT121D

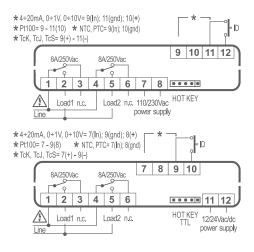
ON/OFF configurable digital 2 stage controllers with alarm relay

C: 32x74mm D: 4 DIN Rail

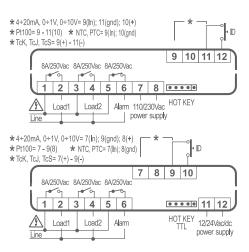
FEATURES	XT120C	XT120D	XT121C	XT121D
Display: n° digits	± 31/2 d.p.	± 3½ d.p.	± 3½ d.p.	± 3½ d.p.
Power supply	12, 24Vac/dc 110, 230Vac	24Vac/dc 24, 110, 230Vac	12, 24Vac/dc 110, 230Vac	24Vac/dc 24, 110, 230Vac
Probe inputs				
NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V	config	config	config	config
Relay outputs				
Stage 1	8A	no 8A/nc 5A	8A	no 8A/nc 5A
Stage 2	8A	no 8A/nc 5A	8A	no 8A/nc 5A
Stage 3				
Stage 4				
Alarm			8A	no 8A/nc 5A
Other				
Digital input	pres	pres	pres	pres
Hot Key/Prog Tool Kit output	pres*	pres	pres*	pres
Serial output	∏L*	TTL	TTL*	ΠL
Analog output		4÷20mA, 0÷10V		4÷20mA, 0÷10V
Buzzer	opt	opt	opt	opt

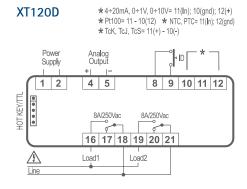
^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

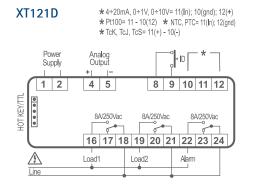
XT120C



XT121C







NEUTRAL ZONE CONTROLLERS

XT130C XT130D

ON/OFF configurable digital neutral zone controllers

XT131C XT131D

ON/OFF configurable digital neutral zone controllers with alarm relay





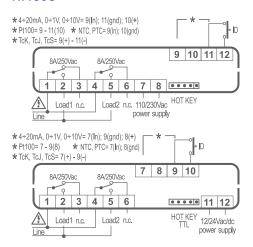
C: 32x74mm

D: 4 DIN Rail

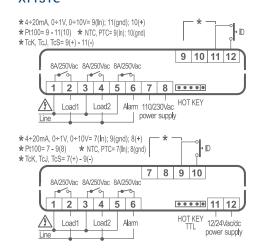
FEATURES	XT130C	XT130D	XT131C	XT131D
Display: n° digits	± 3½ d.p.	± 31/2 d.p.	± 3½ d.p.	± 31/2 d.p.
Power supply	12, 24Vac/dc 110, 230Vac	24Vac/dc 24, 110, 230Vac	12, 24Vac/dc 110, 230Vac	24Vac/dc 24, 110, 230Vac
Probe inputs				
NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V	config	config	config	config
Relay outputs				
Stage 1	8A	no 8A/nc 5A	8A	no 8A/nc 5A
Stage 2	8A	no 8A/nc 5A	8A	no 8A/nc 5A
Stage 3				
Stage 4				
Alarm			8A	no 8A/nc 5A
Other				
Digital input	pres	pres	pres	pres
Hot Key/Prog Tool Kit output	pres*	pres	pres*	pres
Serial output	TTL*	TTL	TTL*	ΠL
Analog output		4÷20mA, 0÷10V		4÷20mA, 0÷10V
Buzzer	opt	opt	opt	opt

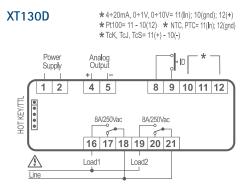
^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

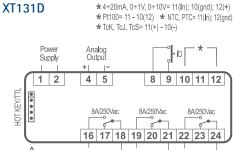
XT130C



XT131C







* 4÷20mA, 0÷1V, 0÷10V= 11(In); 10(gnd); 12(+)

XT100

2 (1 PID), 3 and 4 STAGE CONTROLLERS





XT141C XT141D	Configurable digital 2 stage controllers (1 PID) with alarm relay
XT151D	ON/OFF configurable digital 3 stage controllers with alarm relay

C: 32x74mm

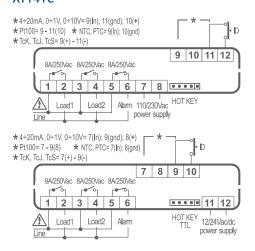
D: 4 DIN Rail

XT160D ON/OFF configurable digital 4 stage controllers

FEATURES	XT141C	XT141D	XT151D	XT160D
Display: n° digits	± 31/2 d.p.	± 3½ d.p.	± 3½ d.p.	± 3½ d.p.
Power supply	12, 24Vac/dc 110, 230Vac	24Vac/dc 24, 110, 230Vac	24Vac/dc 24, 110, 230Vac	24Vac/dc 24, 110, 230Vac
Probe inputs				
NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V	config	config	config	config
Relay outputs				
Stage 1 Stage 2 Stage 3 Stage 4	8A 8A	no 8A/nc 5A no 8A/nc 5A	no 8A/nc 5A no 8A/nc 5A no 8A/nc 5A	no 8A/nc 5A no 8A/nc 5A no 8A/nc 5A 8A
Alarm	8A	no 8A/nc 5A	8A	
Other Digital input Hot Key/Prog Tool Kit output Serial output Analog output	pres pres* TTL*	pres pres TTL 4÷20mA, 0÷10V	pres pres TTL 4÷20mA, 0÷10V	pres pres TTL 4÷20mA, 0÷10V
Buzzer	opt	opt	opt	opt

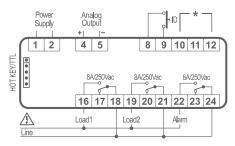
^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

XT141C



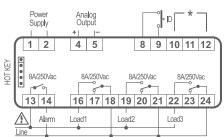


- **★** 4÷20mA, 0÷1V, 0÷10V= 11(**I**n); 10(gnd); 12(**+**) **★** Pt100= 11 10(12) **★** NTC, PTC= 11(**I**n); 12(gnd)
- * TcK, TcJ, TcS= 11(+) 10(-)



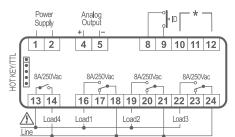
XT151D

- * 4+20mA, 0+1V, 0+10V= 11(In); 10(gnd); 12(+) ***** Pt100= 11 - 10(12) ***** NTC, PTC= 11(In); 12(gnd) ***** TcK, TcJ, TcS= 11(+) - 10(-)



XT160D

- * 4+20mA, 0+1V, 0+10V= 11(In); 10(gnd); 12(+)
- * Pt100= 11 10(12) * NTC, PTC= 11(In); 12(gnd)
- * TcK, TcJ, TcS= 11(+) 10(-)





SECTION INDEX

FUNCTIONS MODELS

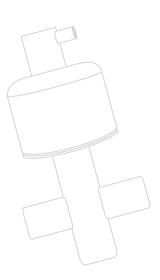
XEV20 – stepper electronic expansion valve management		106
Driver for EEV management compatible with iPro controllers	XEV20D	107
iProGENIUS - general applications - high connectivity		108
Development tool	iPro-TOOL	111
Programmable controllers with disconnectable connectors	IPG108D - IPG108E - IPG115D	112
Programmable controllers with bayonet connectors	IPG208D – IPG208E IPG215D – IPG215F	113
Expansion modules with disconnectable connectors	IPX106D - IPX115D IPX125D - IPX306D	114
Expansion modules with bayonet connectors	IPX206D – IPX215D – IPX225D	114
Connectivity module	IPL500D	115
LCD graphic display	VGIPG	116
Accessory	VISOKEY	116



D: 4 DIN Rail

XEV20: STEPPER ELECTRONIC EXPANSION VALVE MANAGEMENT

- Driver for iPro controllers for the stepper electronic expansion valve management
- Optimization of superheat regulation inside the unit
- Increased energy savings
- Single or dual circuit
- Support for motorized valves unipolar/bipolar
- Temperature analog inputs (NTC, PTC, Pt1000)
- Pressure analog inputs (0÷5V, 4÷20mA)
- 4-position DIP Switch to set the address
- LAN output for the connection to iPro series controllers in 4 DIN format
- CANBus output for the connection to iPro series controllers in 10 DIN format
- Type of refrigerant gas: R22, R134A, R404A, R407, R410, R507



HOW to ORDER

XEV X E V 2 0 D - 1 1 C 0 0

С

N° of valves

0 = 1 valve

1 = 2 valves

DRIVER for EEV MANAGEMENT COMPATIBLE with iPro CONTROLLERS

XEV20

XEV20D

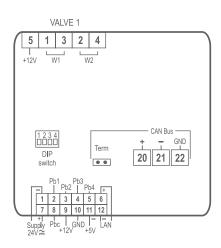
Driver for 1 or 2 unipolar and bipolar stepper electronic expansion valves to use with iPro programmable controllers



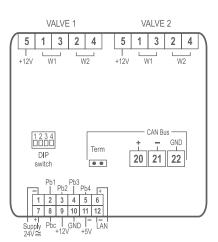
D: 4 DIN Rail

FEATURES	XEV20D
Power supply	24Vac/dc (from TF20D for 1 valve or from TF40D for 2 valves)
Probe inputs	
N°4 (Pb1, Pb2, Pb3, Pb4)	0÷5V/4÷20mA/NTC/PTC/Pt1000 config
Other	
LAN output	pres
CANBus output	pres
DIP switch for address selection	pres
Connection kit	DWXEV30

XEV20D - 1 circuit



XEV20D - 2 circuits





iProgenius series: general applications high connectivity

iProGENIUS is the Dixell family of programmable controllers that offers optimal solutions for all HVAC/R needs. They are suited for all applications in the PLC world including shopping centers, hospitals, airports, boatyards, energy management plants, and more. These controllers provide a high level of technology for ease of external connectivity and programmability providing simple answers for the user's needs, while offering local or remote monitoring control (accomplished with the powerful **iProLINK** connectivity module). An intuitive and useful HMI is also offered through the **VISOGRAPH** graphic display and the touch screen **TGIPG** display, while the expandability provided by the **IPX** modules allows use of these controllers with the most complex machinery.

- Powerful platform based on LINUX operative system on ARM9 (200MHz/32bit) microprocessor
- Internal Web Server with standard and customized Web Site
- Ethernet for connection to an intranet-internet network and to other controllers for a distributed application management
- USB output that allows the download of parameters, data/alarm log and the applications and parameters upload
- RS485 serial outputs for the connection to XWEB supervising and controlling systems or to applications developed by third Party Systems
- BACnet® communications allows the system to have easy and immediate integration with different manufactures ensuring complete interoperability
- Connection to the expansion modules to increase system capacity
- Connection to the driver for the management and control of electronic expansion valves



MAIN FEATURES

- CPU: 200MHz
- Processor 32bit
- RAM memory: 32MB (4 DIN Rail) 64MB (10 DIN Rail)
- Data storing on Flash memory: 32MB (4 DIN Rail)

128MB (10 DIN Rail, IPL500D)

• Power absorption: 40VA max (IPG on 4 DIN Rail)

20VA max (IPG and IPX on 10 DIN Rail, IPL500D)

10VA max (IPX on 4 DIN Rail)

HOW to ORDER

3 = External + internal modem (not for UL)

Ε

Visoprog

0 = No

1 = 2 licences

IPG108D/E - IPG208D/E IPG115D - IPG215D/F

Ι	Р	G	0	8	-	1	0	С	D	0
ı	Р	G	1	5	_	Α	В	С	0	0

	. —		
Α	В	С	D
Power supply	Modem	Ethernet, protocols	Serial port
1 = 24Vac/dc	0 = No	0 = No	1 = LAN
UL versions	1 = Internal modem (not for UL)	1 = Yes (for IPG115D, IPG215D and IPG215F)	2 = RS485 master
2 = 24Vac	2 = External modem	2 = BACnet	

IPX106D	
IDASUED	

3 = 24Vdc (for IPG215)

IPX206D - IPX306D

IPX115D - IPX215D

IPX125D - IPX225D

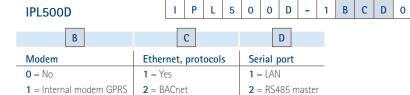
-1	P	Х	1	0	6	D	-	1	0	0	0	0
-1	Р	Χ		0	6	D	-	1	0	0	0	Е
1	Р	Х		1	5	D	-	1	0	0	0	0
1	Р	Х		2	5	D	-	1	0	0	0	2

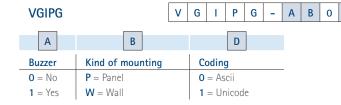
Е

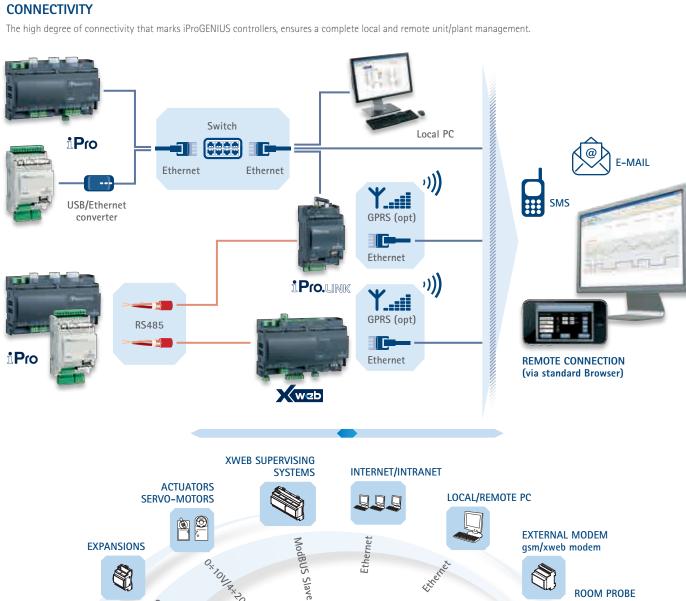
N° of SSR relay

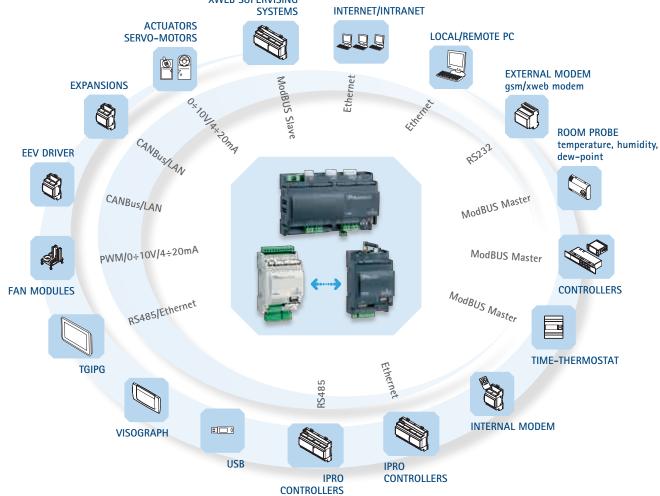
0 = 0

2 = 1









DEVELOPMENT TOOL

1 SaGRAF® + WIZMATE

2 | ISaGRAF® + WIZMATE | + VISOPROG

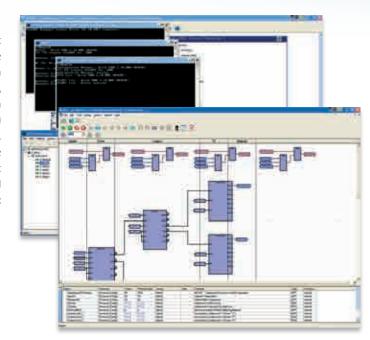
iPro-TOOL is a complete and easy to use tool that allows the user to work independently to create programs for iPro controllers, taking advantage of all the programmable series potential. The package includes manuals and the **ISaGRAF®**, **WIZMATE** and **VISOPROG** (optional) software.

The user can choose among 2 options listed above.

Note: Wizmate can be used with iProRACK applications.

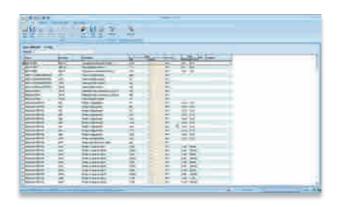
► ISaGRAF®

ISaGRAF® is the standard, international and complete development environment selected by Dixell to create programs that will be uploaded into the iPro series. Also ideal for small applications, it can manage several I/O points, allows users to create control systems, and is supported all over the world. ISaGRAF® offers a combination of a highly portable, robust management engines (Virtual Machine) and an intuitive application development environment (Workbench). ISaGRAF® integrates the best system for simulation and remote debugging, supports the Flow Chart (FC: Flow Chart) and 5 different programming languages coded according to IEC61131 (SFC: Sequencial Function Chart; ST: Structured Text; FBD: Function Block Diagram; IL: Instruction List; LD: Ladder Diagram).



WIZMATE

WIZMATE is versatile software that has a fast and easy programming mode for iPro controllers (ideal for versions with the application included like the iProRACK).



VISOPROG

The VISOPROG is a tool that allows users to create the VISOGRAPH keyboard graphic interfaces. The program, installed on a PC, is connected to ISaGRAF® project and has a basic interface that users can easily customize depending on the requirements.



iProGENIUS

PROGRAMMABLE CONTROLLERS with DISCONNECTABLE CONNECTORS





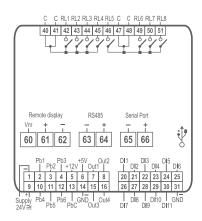
D, E: 4 DIN Rail

D: 10 DIN Rail

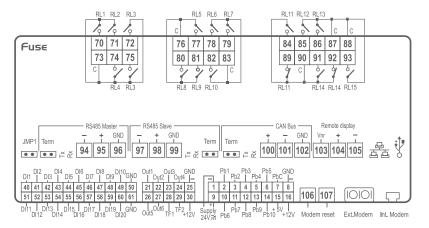
IPG108D	Programmable controller in 4 DIN Rail format with disconnectable + screw connectors
IPG108E	Programmable controller in 4 DIN Rail format with LED display and disconnectable + screw connectors
IPG115D	Programmable controller in 10 DIN Rail format with disconnectable connectors

FEATURES	IPG108D	IPG108E	IPG115D
Display Front led		dual with icons	
Power supply	24Vac/dc from TF40D	24Vac/dc from TF40D	24Vac/dc from TF20D
Probe inputs			
0÷1V, 0÷5V, 0÷10V, 0÷20mA, 4÷20mA, NTC, PTC, DI	6 x config	6 x config	10 x config
Digital inputs			
Optoinsulated	11 x config	11 x config	20 x config
Relay outputs			
Configurable	8 x 5A	8 x 5A	12 x 5A + 3 x 8A
Other outputs			
PWM 0÷10V/4÷20mA 0÷10V	4 x config	4 x config	2 x config
RS485	slave	slave	master + slave
USB External modem	pres	pres	pres GSM, analogue
LAN/RS485 master CANBus	pres	pres	pres
Ethernet	via USB-ETH-CONV	via USB-ETH-CONV	opt
Other			
Remote keyboard Internal modem	1 x VGIPG	1 x GIPG	2 x VGIPG analogue opt
Real time clock	pres	pres	pres
Flash memory	32MB	32MB	128MB
Connections	disconnectable + screw	disconnectable + screw	disconnectable
Connection kit	DWS30-KIT, IP-FC108	DWS30-KIT, IP-FC108	DWB30-KIT
Expansion modules	IPX115D, IPX125D, IPX306D	IPX115D, IPX125D, IPX306D	IPX106D, IPX115D, IPX125D
BACnet protocol	opt	opt	opt

IPG108D - IPG108E



IPG115D



PROGRAMMABLE CONTROLLERS with BAYONET **CONNECTORS**

iProGENIUS

IPG208D	Programmable controller in 4 DIN Rail format with bayonet + screw connectors, ideal for the civil field
IPG208E	Programmable controller in 4 DIN Rail format with LED display and bayonet + screw connectors, ideal for the civil field
IPG215D	Programmable controller in 10 DIN Rail format with bayonet + screw connectors, ideal for the civil field
IPG215F	Programmable controller in 10 DIN Rail format with front LED and bayonet + screw connectors, ideal for the civil field



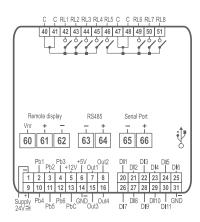


D, E: 4 DIN Rail

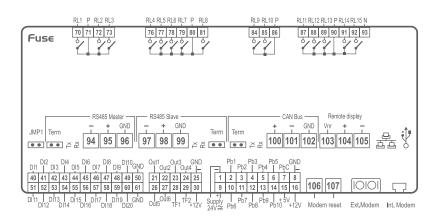
D, F: 10 DIN Rail

FEATURES	IPG208D	IPG208E	IPG215D	IPG215F
Display		dual with icons		
Front led				n° 5
Power supply	24Vac/dc from TF40D	24Vac/dc from TF40D	24Vac/dc from TF20D	24Vac/dc from TF20D
Probe inputs				
0÷1V, 0÷5V, 0÷10V, 0÷20mA, 4÷20mA, NTC, PTC, DI	6 x config	6 x config	10 x config	10 x config
Digital inputs				
Optoinsulated	11 x config	11 x config	20 x config	20 x config
Relay outputs				
Configurable	8 x 5A	8 x 5A	15 x 5A	15 x 5A
Other outputs				
PWM				
0÷10V/4÷20mA	4 x config	4 x config	2 x config	2 x config
0÷10V			4	4
RS485	slave	slave	master + slave	master + slave
USB	pres	pres	pres	pres
External modem			GSM, analogue	GSM, analogue
LAN/RS485 master	pres	pres		
CANBus			pres	pres
Ethernet	via USB-ETH-CONV	via USB-ETH-CONV	opt	opt
Other				
Remote keyboard	1 x VGIPG	1 x VGIPG	2 x VGIPG	2 x VGIPG
Internal modem			analogue opt	analogue opt
Real time clock	pres	pres	pres	pres
Flash memory	32MB	32MB	128MB	128MB
Connections	bayonet + screw	bayonet + screw	bayonet + screw	bayonet + screw
Connection kit	IP-FC208	IP-FC208	IP-FC215CP	IP-FC215CP
Expansion modules	IPX206D, IPX215D, IPX225D	IPX206D, IPX215D, IPX225D	IPX206D, IPX215D, IPX225D	IPX206D, IPX215D, IPX225
BACnet protocol	opt	opt	opt	opt

IPG208D - IPG208E



IPG215D - IPG215F



IPX

EXPANSION MODULES with DISCONNECTABLE and BAYONET CONNECTORS







D: 4 DIN Rail D: 4 DIN Rail



D: 4 DIN Rail





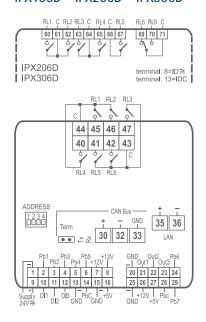
D: 10 DIN Rail

D: 10 DIN Rail

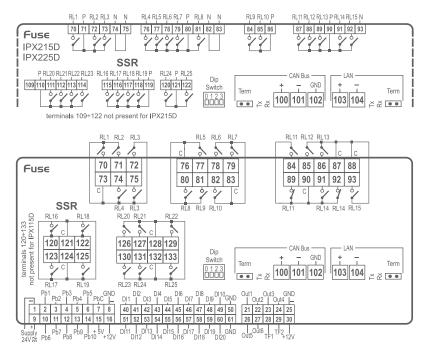
IPX106D	Expansion module in 4 DIN Rail format with disconnectable connectors and 6 relay outputs
IPX115D	Expansion module in 10 DIN Rail format with disconnectable connectors and 15 relay outputs
IPX125D	Expansion module in 10 DIN Rail format with disconnectable connectors and 25 relay outputs
IPX206D	Expansion module in 4 DIN Rail format with bayonet + screw connectors and 6 relay outputs
IPX215D	Expansion module in 10 DIN Rail format with bayonet + screw connectors and 15 relay outputs
IPX225D	Expansion module in 10 DIN Rail format with bayonet + screw connectors and 25 relay outputs
IPX306D	Expansion module in 4 DIN Rail format with disconnectable + screw connectors and 6 relay outputs

FEATURES	IPX106D	IPX115D	IPX125D	IPX206D	IPX215D	IPX225D	IPX306D
TLATUNES	II X 100D	IIXIIOD	II X 1230	II A200D	11 72 130	II X225D	II V200D
Power supply	24Vac/dc from TF10D	24Vac/dc from TF20D	24Vac/dc from TF20D	24Vac/dc from TF10D	24Vac/dc from TF20D	24Vac/dc from TF20D	24Vac/dc from TF10D
Probe inputs							
0÷1V, 0÷5V, 0÷10V, 0÷20mA, 4÷20mA, NTC, PTC, DI	7 x config	10 x config	10 x config	7 x config	10 x config	10 x config	7 x config
Digital inputs							
Optoinsulated	3 x config	20 x config	20 x config	3 x config	20 x config	20 x config	3 x config
Relay outputs							
Configurable	6 x 5A	12 x 5A + 3 x 8A	18 x 5A + 3 x 8A + 4 x SSR	5 x 5A + 1 x 8A or 4 x 5A + 1 x 8A + 1 x SSR	15 x 5A	21 x 5A + 4 x SSR	5 x 5A + 1 x 8A or 4 x 5A + 1 x 8A + 1 x SSR
Other outputs							
0÷10V/4÷20mA		2 x config	2 x config		2 x config	2 x config	
0÷10V	3	4	4	3	4	4	3
LAN CANBus	pres	pres	pres	pres	pres	pres	pres
Other							
Dip switch for address set	pres	pres	pres	pres	pres	pres	pres
Connections	disconnectable	disconnectable	disconnectable	bayonet + screw	bayonet + screw	bayonet + screw	disconnectable + screw
Connection kit	DWEX60-30KIT	DWX115-30KIT	DWEX70-30KIT	IP-FCEX60	IP-FCX215	IP-FCEX70	DWEX306-30KIT

IPX106D - IPX206D - IPX306D



IPX115D - IPX125D - IPX215D - IPX225D



CONNECTIVITY MODULE

iProLINK

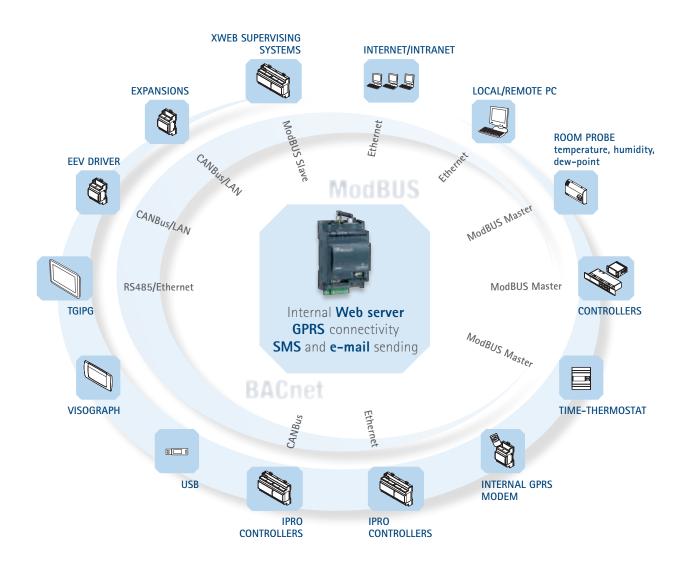
IPL500D

Programmable connectivity module designed to collect, store, process, and manage data. It is compatible with the iPro controllers and allows downloading of applications for data processing or management of other integrated devices



D: 4 DIN Rail

EATURES	IPL500D
Power supply	24Vac/dc from TF20D
Outputs	
RS485	slave
USB	pres
LAN/RS485 master	pres
CANBus	pres
Ethernet	pres
Other	
Remote keyboard	VGIPG
Internal modem	GPRS opt
Real time clock	pres
Flash memory	128MB
Connections	screw
Connection kit	IP-FC500
BACnet protocol	opt



VISOGRAPH

LCD GRAPHIC DISPLAY

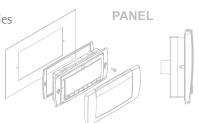


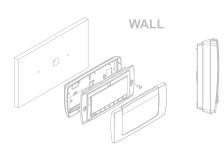
VGIPG Graphic display fully programmable (via VISOPROG or through USB from the iPro) for iProGENIUS controllers with LCD graphic display with 240x96pixels

VG: 82x156mm

FEATURES	VGIPG
Power supply	from controller
Visokey output	pres
Buzzer	opt

- Great versatility and extensive customization opportunities
- Complete integration with ISaGRAF® projects
- UNICODE character compatible
- Quick panel or wall mounting
- Up to 2 keyboards connectable with iPro controllers
- Maximum distance from the controller: 150m





VISOPROG

 $VISOPROG\,allows\,the\,creation\,of\,graphic\,interfaces\,for\,VISOGRAPH$ keyboards, VGIPG model. The program installed on a PC is connected to the ISaGRAF® project with a basic interface that can be easily customized based on the user's needs. VISOPROG allows a direct transfer of the user interface from PC to a keyboard. The image on the right shows an operative VISOPROG screen with the relative VISOGRAPH final interface



ACCESSORY

VISOKEY

Programming kit for Visograph keyboards





SECTION INDEX

FUNCTIONS MODELS

TGIPG - high programmability		118
Programmable touch screen displays	TGIPG	120
Accessories	TF-TGIPG - CAB/485-TGIPG	120



TGIPG SERIES: HIGH PROGRAMMABILITY

To make easier, more intuitive and complete communication with their controllers, Dixell introduces the innovative family (**TGIPG**) of TFT touch screen displays, characterized by its aesthetic value and fast Ethernet/Internet connectivity.

The versatile and compact line, exceptional hardware performances, advanced functionalities, and a large number of symbols and templates makes the TGIPG family the perfect solution for HVAC/R needs. The easy programming mode and the use of a graphic editor make the creation of a user interface quick and easy.

- Powerful platform based on ARM9 (400MHz) microprocessor, RAM memory 64MB (DDR2), data storing on FLASH memory 128MB SSD and on external card SD
- Connection with Dixell controllers via RS485 or Ethernet
- Remote connection (via Internet)
- USB for mouse, printer and application update
- TFT-LCD display 16.7 million colors (true color), LED backlight
- Solid and elegant silver housing
- IP65 front protection
- Advanced graphic (vector) features
- Ability to create a fast, custom synoptic overview of the unit
- Complete alarm management
- Built in data logger
- Runtime graphics
- Multilanguage management with automatic translation via Internet
- Simulation mode to check applications on PC
- 1A max power absorption

HOW to ORDER

TGIPG T G I P G - A 0 0 0 0

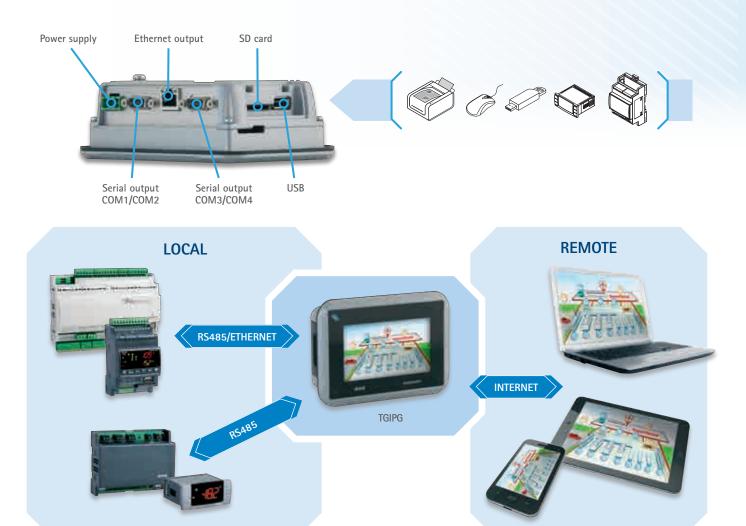


Version

- **0** = 4,3"
- 2 = 7''
- **3** = 10,4"

CONNECTIVITY

Touch screen displays of the TGIPG line with multiple ports, are characterized by high connectivity both local and remote to satisfy every application need.



SOFTWARE

The TGIPG family is characterized by quick and easy graphic editor that allows for faster creation of applications. The integrated guideline functions, with its large number of symbols and templates, combined with the ability to manage high resolution images allows complex interfaces to be easily created while at the same time being complete, intuitive, and appealing. Effective language management through a dedicated menu and automatic translation via the Internet are among the many strengths of the touch screen line. Below is an example of a "final screen" and an example of a "variables configuration window".





TGIPG

PROGRAMMABLE TOUCH SCREEN DISPLAYS







TGIPG

Programmable TFT touch screen displays

TGIPG: 228x280mm

TGIPG: 143x204mm

TGIPG: 104x145mm

FEATURES	TGIPG v. 4,3"	TGIPG v. 7"	TGIPG v. 10,4"
Power supply	24Vdc	24Vdc	24Vdc
Format	16:9	16:9	4:3
Display	480x272pixels	800x480pixels	640x480pixels
Ethernet output	pres	pres	pres
Serial output	2 x RS485/232/422	2 x RS485/232/422	2 x RS485/232/422
USB output	pres	pres	pres
Buzzer (beeps when pressed)	pres	pres	pres
Real time clock	pres	pres	pres

ACCESSORIES

TF-TGIPG

Power supply 24Vdc/1A for TGIPG



CAB/485-TGIPG

Cable for RS485 connection with connector for TGIPG



CAB/WEB/PC

Ethernet patch cross over cable, 1m





SYSTEMS

FUNCTIONS

SECTION INDEX

GLOBAL RETAIL SOLUTION 122 XWEB300D - alarm management and controlling 124 Alarm and controlling web server XWEB300D 124 XWEB500 - XWEB500D - monitoring and controlling 126 XWEB500 - XWEB500D Monitoring and controlling web server 126 XWEB3000 - industrial monitoring and controlling 128 Industrial monitoring and controlling web server XWEB3000 128 XWEB5000 - monitoring, controlling and supervising 130 Monitoring, controlling and supervising web server XWEB5000 130 **XWEB FUNCTIONS** 132 **XWEB CONNECTIONS** 134 **XWEB SYSTEM GUIDE** 136 iCOOLL - wireless solution 137 TX/RX modules for wireless network XJ200 137 Accessory PW200J 137 XJM - I/O management 138 Multifunction module for inputs and outputs XJM60D 139 Keyboard for XJM controller VJM60 139 XJA-XJP-XJR - relay and acquisition management 140 Alarm/status acquisition modules XJA50D - XJA50SL 141 Probe and alarm data acquisition modules XJP30D - XJP40D - XJP60D 141 XJR40D Relay module 141 Keyboard for XJA-XJP-XJR controllers KB1 PRG 141 Accessory CAB/KB11 141 XCENTER - centralized management 142 **XCENTER** Centralized management software for Call Center 142

MODELS

GLOBAL RETAIL SOLUTION

Research, great experience, regulation and design innovation: these are the elements that allow Dixell to offer controllers and supervising systems that are in the forefront for all refrigeration applications, cooking and air conditioning fields. A series of specific solutions and a comprehensive range that extends from Thermometers to Multifunction Controllers, from Supervising Systems to the Call Centers, for a completely centralized plant.

In particular, Dixell's systems are a range designed to satisfy all quality, user friendliness and efficiency requirements for every kind of application.

Dixell, with its systems, integrates and coordinates all components of system regulation in order to optimize the efficiency and to increase energy savings.



Some of Dixell's instruments that allow this are:

- the innovative suction pressure management of compressor rack's through CRO
- the dew point check and the modular management of anti-sweat heaters
- the load supervising and the electric consumption peak management

In addition the typical functions of a monitoring system:

- the temperature recording according to HACCP regulations
- the transmission and management of regulation and plant alarms

Results prove that Dixell systems are in synergy with all regulation components ensuring:

- better performance
- greater efficiency
- a complete local and remote monitoring
- maximum environmental preservation

XCENTER, the centralized management software ideally suited for a modern and organized Call Center, completes the range of products. A powerful and affordable instrument that allows a remote plant monitoring.

SYSTEMS



XWEB5000



XWEB3000



XWEB500 - XWEB500D



XWEB300D



CALL CENTER







XWEB300D: ALARM MANAGEMENT and CONTROLLING

It is extremely well suited for 6 or 18 device installations such as petrol stations, mini-market, small storage centres. A simple DIN Rail mounting (4 DIN) and the absence of local user interface make the XWEB300 the ideal solution for the remote assistance (via modem) to the plant. Local or remote connection from PC is made without the need for special software, only standard web browser (Microsoft Internet Explorer® or Firefox®) software is needed; the information is displayed as Web pages. The competitive price lets you to use this Web Server in applications with a only a single regulator such as compressor rack and medical close control.

- Data capture and alarm monitoring WEB server connectable to Dixell's controllers with serial output or to others ModBUS-RTU compatible devices
- XWEB is a 10DIN Rail module for easy DIN Rail mounting (DIN) directly inside the machine board or wall mounting with brackets
- Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- Possibility to see and modify the parameters of the connected devices remotely
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows viewing data in graphical format (Excel®)
- One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time for 6 or 18 controllers)
- XWEB is always accessible even with isolated installations using the built-in GPRS connectivity (optional)
- Access to customized functions
- Data export on USB pendrive
- Alarm sending via FAX, SMS or e-mail
- 15VA max power absorption

	HOW	to	ORDER
--	-----	----	-------

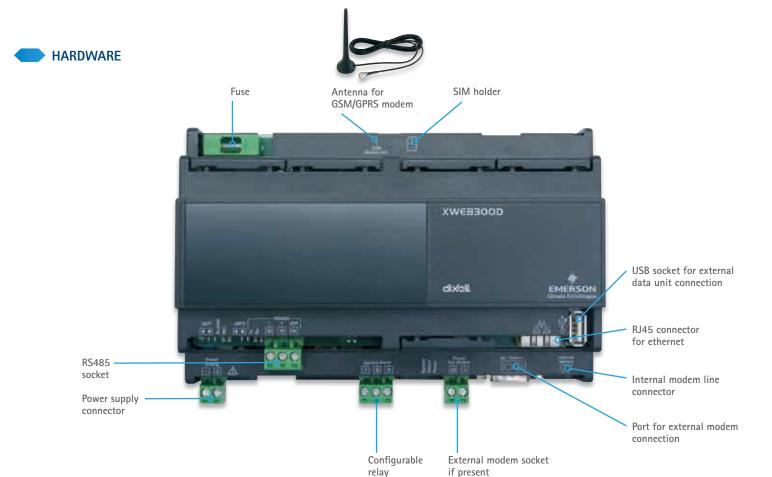
XWEB300D	X V	Е	В	3	0	0	D	-	Α	В	0	0	Е
Α				В						Е			
Power supply		N°	of in	strui	nent	s	Inte	rnal	mod	lem			
2 = 24Vac		B =	6				0 =	No					
8 = 110÷230Vac		F=	18				1 =	Anal	ogue				
							2 =	GSM	/GPR	S			

XWEB300D checks the unit and, in case of malfunction alarm, it notifies the assistance center through FAX, SMS or e-mail. It allows OEM's via direct control to decide to engage a local service call out only if necessary. XWEB300D can also record all data relevant to the function of the controlled unit and insert them into a table. In this way the OEM has important information for new models for improvement of the unit itself.

Thanks to LAN port, the connection (also via internet) to the XWEB300D is easy and safe and no special software is required. It is possible to see all the variables of a controller and to manage of all parameters and alarms. With Java Applet it is possible to generate comprehensive visual graphs.



FEATURES	XWEB300D
Power supply	24, 110÷230Vac
LAN output	pres
USB output	pres
RS485 output	pres
Relay output	1 config
Sampling time	from 1 to 60 minutes
External modem	analogue or GSM
Internal modem	analogue or GSM/GPRS opt





XWEB500-XWEB500D: MONITORING and CONTROLLING

It is extremely well suited for medium installations up to 36 or 100 devices, such as petrol stations, supermarkets or storage centers. Its innovative and useful features make the instrument suitable for medium-large applications such as production and storage goods centers. Thanks to its two available formats, it can be installed whether on DIN Rail or wall or panel mounting, but can also be used as desk instrument. Local or remote connection from a PC is made without the need of special software, only a standard web browser (Microsoft Internet Explorer® or Firefox ®) software is needed; the information is displayed as Web pages.

- Data capture and alarm monitoring WEB server connectable to Dixell's controllers with serial output or to others ModBUS-RTU compatible devices
- Ability to operate in stand alone mode thanks to the local display and keyboard (XWEB500)
- Easy DIN Rail mounting (DIN) directly inside the machine board or wall mounting with brackets (XWEB500D)
- Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- Possibility to see and modify the parameters of the connected devices remotely
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows to view data in graphical format (Excel®)
- One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time for 36 or 100 controllers)
- XWEB500D is always accessible even with isolated installations using the built-in GPRS connectivity (optional)
- Layout for netsurfing of web site in graphic format
- Data export on USB pendrive
- Performance Meter for cooling demand control
- Alarm sending via FAX, SMS or e-mail
- 15VA max power absorption for XWEB500D and 20VA max for XWEB500

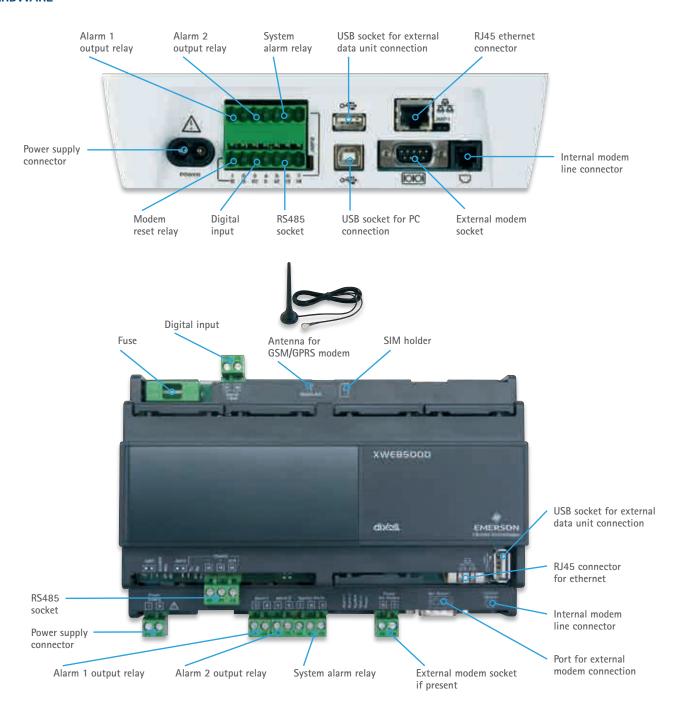
HOW to ORDER

XWEB500	Х	W	Е	В	5	0	0	-	Α	В	0	0	Е	
XWEB500D	Х	W	Ε	В	5	0	0	D	-	Α	В	0	0	Е

Α	В	E
Power supply	N° of instruments/CRO	Internal modem
2 = 24Vac (for XWEB500D)	H = 36/no	0 = No
4 = 110Vac (for XWEB500)	N = 50/CRO (1 engine)	1 = Analogue
5 = 230Vac (for XWEB500)	T = 100/no	2 = GSM/GPRS (for XWEB500D)
8 = 110÷230Vac (for XWEB500D)		

FEATURES	XWEB500	XWEB500D
Power supply	110, 230Vac	24, 110÷230Vac
LAN output	pres	pres
USB output	2	1
RS485 output	pres	pres
Relay output	3	3
Digital input	pres	pres
Sampling time	from 1 to 60 minutes	from 1 to 60 minutes
External modem	analogue or GSM	analogue or GSM
Internal modem	analogue opt	analogue or GSM/GPRS opt

HARDWARE





XWEB3000: INDUSTRIAL MONITORING and CONTROLLING

It is extremely well suited for larger installations with up to 247 devices such as supermarkets, hypermarkets or large storage and distribution centers as well as production and storage goods processing such as fast-food, restaurants, catering up to medical and pharmaceutical applications. XWEB3000 is the ideal solution for service needs (modem, ethernet and internet connection); it can operate, as a stand-alone server without using a PC but it's also simple to connect a monitor, keyboard and mouse. Local or remote connection from a PC is made without the need of special software; only a standard web browser (Microsoft Internet Explorer® and Firefox ®) software is needed.

- Data capture and alarm monitoring WEB server connectable to Dixell's controllers with serial output or to others ModBUS-RTU compatible devices
- 19" RACK or desk mounting
- Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- All controller values can be shown using a special "Single View" window or using "Run Time" window where many controllers can be viewed at the same time. It is even possible to use a "Layout" view of the plant with pictures and schematics drawings
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows to view data in graphical format (Excel®)
- One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time)
- Easy plant management by means of the "Scheduler" to send commands according to a custom calendar
- Calendar function and internal RTC both for alarm transmission to the "in charge" service and command sending to the controllers
- Possibility to divide the controllers set in different categories of products with their own sampling time
- Ability to select particular data on which to perform the monitoring with reduced sampling time
- Alarm sending via FAX, SMS or e-mail
- Commands sending activation through digital input
- Standard communication protocol ModBUS-RTU
- 50VA max power absorption

____E

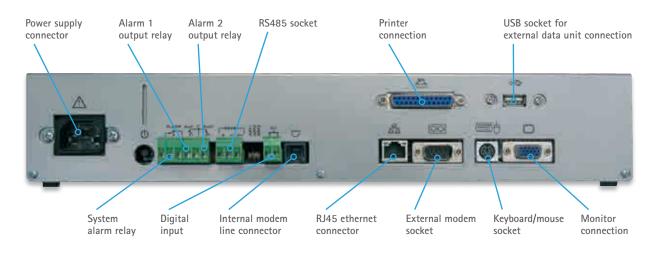
Easy configuration, efficient management of all controller values and a display of controllers also using pictures and schematic drawings: these are some of the XWEB3000's strengths. It is an intuitive, powerful and at the same time, very versatile device. This web server allows parameter and alarm management with different levels and typologies, providing the user with the possibility to divide the controllers into different categories, each with their own sampling periods. Powerful tools include: the scheduler which is a graphic instrument created to manage commands sent to the controllers, data export used to save data in a Microsoft Excel file, and the back-up function to have data-safe protection even in the worst environmental usage, also to save all the unit setup.

The alarm signalling for service is very flexible and can be done through FAX, e-mail, SMS and also via relay outputs.



FEATURES	XWEB3000
Power supply	110÷230Vac
LAN output	pres
USB output	2
RS485 output	pres
Relay output	3
Digital input	pres
Printer output	25 pin
Keyboard/mouse output	pres
Video output	pres
Sampling time	from 1 to 255 minutes
External modem	analogue
Internal modem	analogue opt

HARDWARE





XWEB5000: MONITORING, CONTROLLING and SUPERVISING

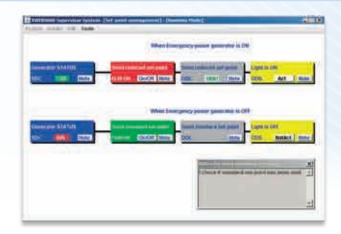
It is provided with a powerful supervision engine suited for larger installations (with up to 247 devices) in the refrigeration, conditioning and building automation field, where it is necessary to program several different interactive actions that the controller has to perform. It is extremely well suited to hypermarkets, large storage and distribution centres, as well as production and storage goods processing and is ideal for the large service center (modem, ethernet and internet connection). The system manages the alarm transmission to the "in charge" service (via FAX, e-mail, SMS and also through relay outputs) and it can also work without a PC using direct connection of a monitor, keyboard and mouse. Local or remote connection PC is made using Microsoft Internet Explorer® and Firefox® browser.

- Monitoring, controlling and supervising web server connection to Dixell's controllers with serial output and to other ModBUS-RTU compatible devices
- 19" RACK or desk mounting
- Built-in editor with local and field simulator
- Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- All controller values can be displayed using a special "Single View" window or a "Run Time" window with many controllers viewed at the same time. The ability to use a "Layout" view of the plant with pictures and schematic drawings is also an option
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows to view data in graphical format (Excel®)
- One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time)
- Easy plant management by means of the "Scheduler" to send commands according to a custom calendar
- Calendar function and internal RTC both for alarm transmission to the "in charge" service and command sending to the controllers
- Possibility to divide the controllers set in different categories of products with their own sampling time
- Ability to select particular data on which to perform the monitoring with reduced sampling time
- Alarm sending via FAX, SMS or e-mail
- Commands sending activation through digital input
- Standard communication protocol ModBUS-RTU
- 50VA max power absorption
- DPC (Dew Point Control) for anti-sweat heater management



SUPERVISING

With XWEB5000 it is possible to intercept sending commands to monitored devices. The installer can create a supervision "Project" (or several "Projects") by programming links between the input variables (inputs, status and outputs of a controller) and defining what actions the system must take when these conditions are met. Unlike a standard PLC, where the user is required to know a specific programming language, with the XWEB5000 the "project" can be easily created using a simple graphic user interface, but more importantly, without the need to learn a complex programming language. Specific software is not necessary: the supervising software has been written in JAVA and it runs on the client PC. The project is saved to the XWEB5000; several projects can be run simultaneously.

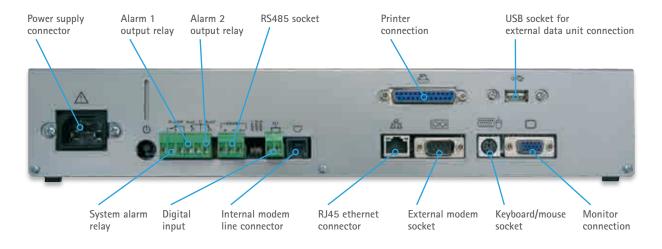


AUTOMATION

The high versatility and programmability allow the XWEB5000 to perform automation programs. In fact it's possible, for example, to manage the use of plant lights, internal or external signs, the battery charge/discharge as fork lifts, increasing the energy saving process. In case of compressor fault or when the absorption threshold exceeds the set, etc., the monitoring unit can automatically interact with the rest of system.

FEATURES	XWEB5000
Power supply	110÷230Vac
LAN output	pres
USB output	2
RS485 output	pres
Relay output	3
Digital input	pres
Print output	25 pin
Keyboard/mouse output	pres
Video output	pres
Sampling time	from 1 to 255 minutes
External modem	analogue
Internal modem	analogue opt

HARDWARE



XWEB FUNCTIONS

An overview of some most important XWEB family functions.



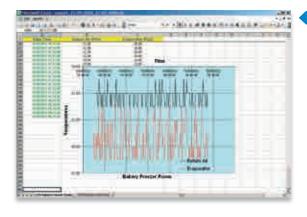
RS485 LINE-CHECK

A powerful new tool is able to check performance and statistical data for each controller by carrying out a functional test for every device connected to the RS485 network. You can then have information regarding the quality of the connection. The tool is very useful especially when there is the necessity analyze a network problem; with statistics that allow you to easily identify which instrument has a connection problem.



PARAMETER PROGRAMMING and RUN TIME

Thanks to the XWEB the user has an intuitive, powerful and versatile device all in one that allows modification of various functioning parameters of the instruments. It will no longer be necessary to make manual adjustments on the controller, because by using the different windows available, and with a few simple operations, it is possible to obtain the required updating. The Run Time function displays many devices together in a unique window. This is dynamic page and the data showed is updated in real time. The status of the devices connected (also from different manufacturers) is displayed simply and clearly and it is possible to modify the various functioning parameters of the instruments.



DATA EXPORT

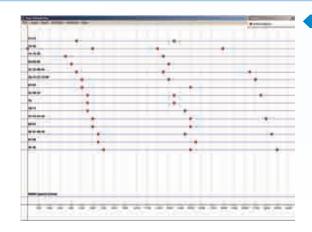
It is possible to export all data information in a Microsoft Excel® file. The user can later use this information to build graphs or to collect data. It is possible to select a data interval and filter between different controllers.

LAYOUT & GLOBAL COMMANDS

(for XWEB500D, XWEB500, XWEB3000, XWEB5000)

A powerful graphic editor that doesn't require the installation of any additional software on your PC is what makes XWEB layout the ideal solution. Using this function, the user can access all the recorded data of the controllers and even send a command to a controller. Global Commands option let you send multiple commands to one or more controllers at the same time. In addition, using the digital input it is possible to automatically start the sending of commands.





SCHEDULER

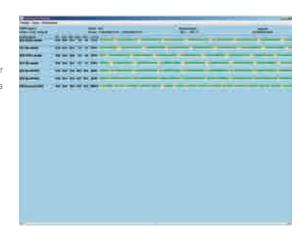
(for XWEB500D, XWEB500, XWEB3000, XWEB5000)

The scheduler is a powerful graphic tool to manage commands sent to the controllers. You can quickly see an overview of all daily activity. This means that energy saving routines and defrosts can be easily scheduled.

PERFORMANCE METER

(for XWEB500D, XWEB500, XWEB3000, XWEB5000)

This highly appreciated function allows users to verify the right temperature for single devices (wall cabinets, benches, rooms, and more). The graphical layout offers a complete view of the plant operating mode.



GRAPHICS

(for XWEB300D, XWEB500D, XWEB500, XWEB3000, XWEB5000)

CIRCULAR GRAPHICS

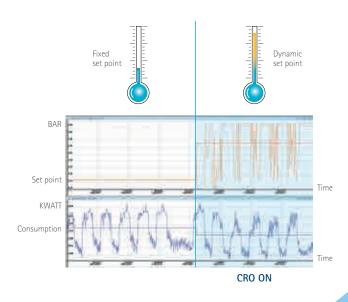
(for XWEB3000, XWEB5000)

The XWEB can supply powerful graphs that areable to represent multiple analoge variables on the same pictorial system and the course of the status of the outputs and alarms. This allows the user to have a precise snapshot view of important variables for easy diagnosis of faults. Thanks to the high sampling rate of circular graphs, they are more detailed and appreciated by service personnel for diagnostics.



(for XWEB500D, XWEB500, XWEB5000)

Thanks to the special CRO algorithm (Compressor Rack Optimization), the connection to the modern supervising systems (of Dixell) allows the management of the compressor rack set point in the best possible way, depending on the devices connected, which can result in plant optimization and energy savings. The system, equipped with the CRO function, analyzes the information from the controller to determine if a controller needs more refrigeration power and how much. The set point will be recalculated in order to satisfy the worse instance and sent from the supervising system to the XC1000D compressor rack controller; this will be the new working set point. If the supervising system can't manage the XC1000D, it's the controller that "decides" to replace the set point (coming from the system) and will then re-define the set point in the planning phase of a refrigeration plant. The two graphs emphasize that when the CRO algorithm is active, in a real installation, the set point becomes on average higher, and consequently the energy consumption decreases. The dotted line represents the average weekly value.



XWEB CONNECTIONS

The high connectivity is one of the main XWEB family's strengths; see below for an overview of several methods to connect with the systems.



When the connection is made by means of a Palmtop computer (PDA), the XWEB automatically recognizes it and makes several dedicated pages available. It is possible to display all the values of a device and send it commands on the PDA.



LOCAL CONNECTIONS

XWEB server and associated systems can be locally linked connecting the system to a PC.



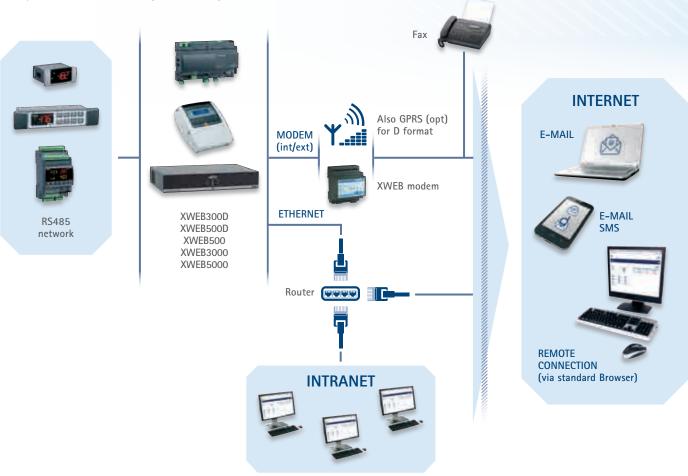
The complete and powerful hardware platform typical of XWEB3000 and XWEB5000 systems allows them to be used as the local machine by way of monitor, keyboard and mouse connection.



REMOTE CONNECTIONS

XWEB Servers can be remotely accessed using several methods:

- by modem with point to point connection, also with GSM modem (only for devices that support it);
- by link in local Ethernet network, by means of standard net connector RJ45;
- by direct Internet connection, if provided with a public and static IP address.



The GPRS connectivities are a popular favorite, which distinguishes it as a best-solution in case of alarm management with medium-small applications, and the ETHERNET in case of tele-assistance and contron with medium-large applications.



XWEB SYSTEM GUIDE

	XWEB300D	XWEB500D	XWEB500	XWEB3000	XWEB5000
Applications	small and medium	medium and large	medium and large	large	large with supervision
Format	10 DIN Rail	10 DIN Rail	210x230x87h	350x235x47h	350x235x47h
Power supply	24Vac or 110÷230Vac	24Vac or 110÷230Vac	110Vac or 230Vac	110÷230Vac	110÷230Vac
Display			•		
N° of instruments	6 - 18	36 - 100	100	247	247
USB port for PC connection			•		
USB output for device connection	•	•	•	•	•
Relay output	1	3	3	3	3
Digital input		•	•	•	•
LAN output	•	•	•	•	•
RS485 output	•	•	•	•	•
External modem	analogue or GSM	analogue or GSM	analogue or GSM	analogue	analogue
Internal modem	analogue or GSM/GPRS opt	analogue or GSM/GPRS opt	analogue opt	analogue opt	analogue opt
Sampling time	from 1 to 60 minutes	from 1 to 60 minutes	from 1 to 60 minutes	from 1 to 255 minutes	from 1 to 255 minutes
RS485 line check	•	•	•	•	•
Parameter programming	•	•	•	•	•
Run time function	•	•	•	•	•
Data export in Excel® format	•	•	•	•	•
Graphics	•	•	•	•	•
Layout function		•	•	•	•
Scheduler function		•	•	•	•
Global commands		•	•	•	•
Performance meter		•	•	•	•
Circular graphics				•	•
Supervision module					•
CRO module		•	•		•



iCOOLL SERIES: WIRELESS SOLUTION

- TX/RX modules (XJ200) for wireless network dedicated to data monitoring (the master module has to be connected to the XWEB, the slave modules are connected to the instruments through the ModBUS protocol)
- Self-configuring MESH system for the optimization of communication (the network is able to create and to use all possible "connections" between the master and the slave node)
- User-friendly and less installation time and costs
- Operating frequency: 868Mhz (922Mhz for US market FCC approved)
- High range (450m no obstacles)
- Ability to connect up to 240 instruments to the same XJ200
- Ability to manage up to 20 HOP
- Ability to connect up to 40 XJ200 to the same net
- 1,5m wire (power supply/RS485) with functional bracket included (fig. 1)
- Standard communication protocol ModBUS-RTU
- 0,25VA max power absorption



HOW to ORDER

XJ200 X J 2 0 0 - A 0 0 0 0



Frequency

0 = 868Mhz

1 = 922Mhz



ACCESSORY

PW200J

Power supplier for XJ200 modules with TTL-RS485 converter





XJM: I/O MANAGEMENT

- Acquisition and command module for refrigeration, air conditioning and BMS applications
- Great flexibility: all the necessary I/O types in one device
- Configurable analog inputs
- Data acquisition by means of sensors with alarm limits
- Up to 12 digital inputs for alarms, status and sensors interlock
- Pressure/temperature conversion
- Available with or without display
- Hot Key or Prog Tool Kit connector for quick and easy programming
- Serial connection to monitoring systems or BMS
- 20VA max power absorption
- Dual display with red LED (8,5mm high) and yellow LED (7,5mm high) and 17 icons

TYPICAL APPLICATIONS

Retrofit and data acquisition for:

- Cabinets
- Cold rooms with 2 evaporators
- Compressor racks up to 4 compressors
- Pulses counters

XJM60D	Χ	J	М	6	0	D	-	Α	В	С	0	0
VJM60	٧	J	М	6	0	-	0	0	0	0	0	

Α	В	С
Power supply	Display	N° of relay
2 = 24Vac	0 = No	1 = 1
4 = 110Vac	1 = Yes	4 = 4
5 = 230Vac		

MULTIFUNCTION MODULE and KEYBOARD for INPUT and OUTPUT MANAGEMENT



XJM60D | Multifunction module for inputs and outputs with management of up to 4 relays

VJM60 Keyboard for XJM60D module





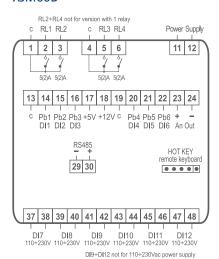
D: 4 DIN Rail

100x64mm

FEATURES		XJM60D						
First display: n° digits Second display: n° digits Power supply	4 d.p. 4 d.p. 24Vac	no display	4 d.p. 4 d.p. 110, 230Vac	no display	4 d.p. 4 d.p. from controller			
Inputs								
Probe Digital (free of voltage) Digital (power supply voltage)	6 x config*	6 x config*	6 x config*	6 x config*				
Relay outputs								
Configurable	1 x 5A, 4 x 5A	1 x 5A, 4 x 5A	1 x 5A	1 x 5A				
Other								
Hot Key/Prog Tool Kit Remote keyboard Analog output	pres 4÷20mA/0÷10V	pres VJM60 4÷20mA/0÷10V	pres 4÷20mA/0÷10V	pres VJM60 4÷20mA/0÷10V				
Serial output	RS485	RS485	RS485	RS485				

^{*} Up to 6 digital inputs or 6 x NTC/PTC/Pt1000 probe inputs or 3 x NTC/PTC/Pt1000 probe inputs + 3 x $4 \div 20 \text{mA}/0 \div 5 \text{V}/0 \div 10 \text{V}/\text{pulse}$ probe inputs

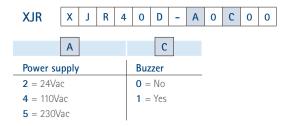
XJM60D





XJA-XJP-XJR SERIES: RELAY and ACQUISITION MANAGEMENT

- Digital inputs for local enable/disable of relays (XJR)
- Data acquisition modules suitable for collecting data from any kind of installation (XJP)
- Up to 6 inputs for NTC, PTC, 4÷20mA and 0÷10V and 3 digital inputs or 4 Pt100 inputs and 4 digital inputs (XJP)
- Up to 10 line voltage inputs (XJA)
- Direct line power supply 230 (110)Vac. No external transformer required
- Remote display option
- Hot Key or Prog Tool Kit connector for quick and easy programming
- Serial connection to monitoring systems
- 6VA max power absorption



XJA-XJP30/60	X	J				D	-	Α	В	С	D	Е	
XJP40	X	J	Р	4	0	D	-	Α	В	0	R	4	
XJA50SL	X	J	Α	5	0	S	L	-	Α	0	0	0	0

Α	В	С	D	E
Power supply	Measurement unit	Alarm relay	Probe inputs	Digital inputs
2 = 24Vac	C = °C	0 = No	P = PTC	3 = 3 (only for XJP30/60D)
4 = 110Vac	F = °F	1 = Yes (only for XJA50D)	N = NTC	5 = 5 (only for XJA50D)
5 = 230Vac	N = No temperature		$A = 4 \div 20 \text{mA}$	6 = 6 (only for XJP30D)
			W = 0÷10V	
			0 = No	

KEYBOARD and RELAY MODULES and PROBE and ALARM ACQUISITION MODULES

XJA-XJP-XJR

XJA50D XJA50SL	Alarms/status acquisition modules able to read up to 5 + 5 independent inputs (master + slave)
XJP30D XJP40D XJP60D	Probes and alarms data acquisition modules able to read up to 9 different inputs
XJR40D	Relay module able to manage up to 4 independent outputs
KB1 PRG	Programming keyboard for XJA50D - XJP30D - XJP40D - XJP60D - XJR40D modules





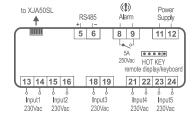
D: 4 DIN Rail

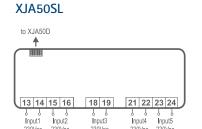
100x64mm

FEATURES	XJA50D	XJA50SL	XJP30D	XJP40D	XJP60D	XJR40D	KB1 PRG
Display: n° digits Keyboard: push buttons Power supply	24, 110, 230Vac	from controller	24, 110, 230Vac	24, 110, 230Vac	24, 110, 230Vac	4 24, 110, 230Vac	± 3 d.p. 6 from controller
Inputs							
Analogue			3 x NTC, PTC, 4÷20mA, 0÷10V	4 x Pt100	6* x NTC, PTC, 4÷20mA, 0÷10V		
Digital (power supply voltage) Digital (free of voltage)	5	5	3 3 opt	4	3 3*	4	
Relay outputs							
Alarm Load	5A opt					4 x no 8A/nc 5A	
Other							
Hot Key/Prog Tool Kit output Remote display/keyboard output Serial output Serial addresses Buzzer	pres X-REP/KB1 PRG RS485 5	5	pres X-REP/KB1 PRG RS485 3	pres X-REP/KB1 PRG RS485 4	pres X-REP/KB1 PRG RS485 6	pres KB1 PRG RS485 1 opt	

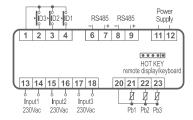
^{*} XJP60D has 3 analogue inputs that are configurable as free of voltage digital inputs

XJA50D

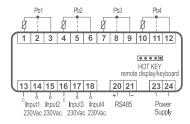




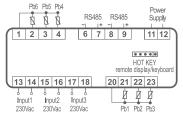
XJP30D



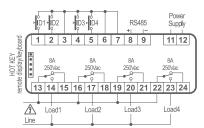
XJP40D



XJP60D



XJR40D



AC

ACCESSORY

CAB/KB11

1m cable to connect the keyboard to the XJA-XJP-XJR modules





XCENTER: CENTRALIZED MANAGEMENT

Designed and developed in order to monitor plants that are positioned in different zones, XCENTER is a flexible, reliable and user-friendly software package. Efficient assistance is a widespread requirement among distribution centers, small and large supermarkets, industrial plants, and more. XCENTER gives this type of support with alarm management, continuous device checks, and recipient management with functional reports. XCENTER doesn't have limits regarding the number of plants and controllers that can be checked and is suitable for every kind of requirement.

- Modular software that, when installed in a server PC, communicates with clients (XWEB systems and remote PC)
- Data and alarms files from real installations, available for all clients
- User interface is simple to understand
- Multilanguage management
- Geo-location positioning and controllers status
- Command sending to real instruments via XWEB interface
- Possibility to quickly modify controllers parameters via XWEB interface
- Alarm setup and management
- Alarm report via e-mail SMS
- Recipient list management
- Statistical data management in graphical format
- Connection between XCENTER and the monitoring units are by means of internet or telephone line (via dial-up or an internet provider)
- Open project that allows add-on software (warehouse and accountant management,...); development on request

XCENTER	X C E N	N T	E R	-	Α	В	0	0	0
Α	В								
N° of server	N° of clie	nt							
0 = 0	N = 0								
A = 1	B = 2								
	L = 10								

The XCENTER SOLUTION

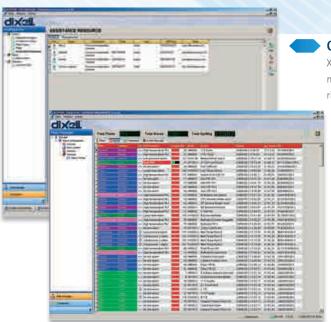


The XCENTER software is composed of two parts.

- XCENTER Server is a server application that manages the Oracle® database and the communication to all connected XWEB controllers. It contains all receiving and sending notifications of alarms, user management, and control signals.
- **XCENTER Client** is the operator interface that is connected to the XCENTER Server and gives a list of alarms, statistics, and configuration tools of all plants monitored by the XWEB family and their web pages by means of the integrated browser. XWEB gives quick access to the monitored controllers with their parameters, commands, and historical data giving a prompt reply about actual conditions or environment with the ability to intervene remotely to solve possible critical situations.

XCENTER INSTALLATION LAYOUT



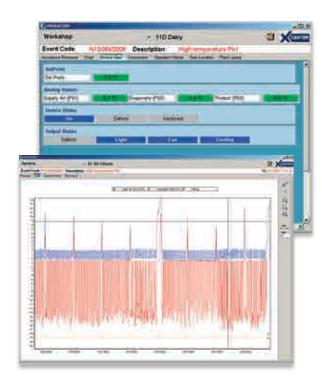


CONTACTS

XCENTER uses a list of recipients to be contacted for local, regional and national events. Based on need, and according to the alarm severity, the right person will be alerted.

ALARM MANAGEMENT

With XCENTER the default level of severity can be increased according to the duration, the frequency, the time of the day.



COMMANDS and PARAMETERS

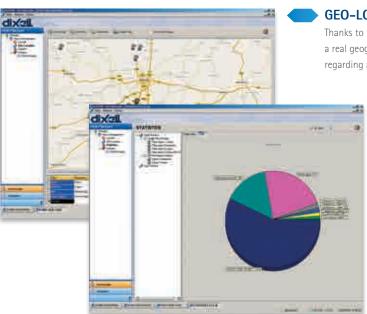
The XCENTER user is authorized to interact with the controller directly from the program or it has the possibility to be connected to the XWEB and start using it just like via the browser. For every alarm the software creates a report to describe the complete history of the alarm.

GRAPHICS

Alarms are displayed together with the log of the past 48 hours of the controller functions. It's possible to determine and understand the kind of problem and decide how and when intervene.

KEEP ALIVE

The "Keep Alive" function is meant to check the hardware status of the monitored installation periodically to ensure reliability of critical devices.



GEO-LOCATION

Thanks to the mapping technology, it is possible to place your installations on a real geographic map. This feature allows the user to find information quickly regarding any installation that sends an alarm.

STATISTICS

XCENTER is provided with several models that generate powerful statistical tools that are used to analyze frequent alarms, critical device installations, or sites. The statistics are useful in preventing critical product or plant situations. There is also the possibility to group alarms together by typology, time interval, installation, and more.