Multi Digital Controller

FX series

Temperature Controller	**FX3S, FX3D, FX3FS, FX3T, FX3QR/FX3SR**
Humidity Controller	**FX3H, FX3DH**
Refrigeration Controller	**FX32J, FX32R, FX32K, FX32C, FX32PR, FX32EV, FX32S**
Multi-Function Controller	**FX32P, FX32F, FX32A, FX32A-351**

DOTECH
SENSING & CONTROL

CE

www.dotech21.com

Multi Digital Controller

FX Series

Digital controller to fits perfectly
for your purpose,
Why don't you change to FX series?

Easy Control & Best Price

FX series has easy settings and excellent transfer among each menu based on simple and convenient constitution, and it embeds a step-by-step access setup function (blind menu function), so that it can prevent the equipments from malfunction. Also, it can provide users with very reasonable price in contradistinction with cost in spite of a combination of network ability and control function.

±0.3℃ Precise Temperature Control & High Reliability

The temperature sensors, such as NTC (-50~150℃), PT-100 (-200~800℃) and TC (0~1000℃) can measure temperature in wide range and provide users with very fine tolerances (0.1℃ temperature resolution).

Free Voltage & Compact Design

There is no restriction to apply for AC100~240V and 50/60Hz.
A simple and streamline shape provides users with visible convenience.

Error & Alarm Display

FX series can show the error information, such as failure and malfunction of the equipment as a simple message, so the supervisors can easily manage it.

Multi Digital Controller (MICOM) Function

FX series is an advanced multi function digital controller which embeds logic at the same level of MICOM according to models and various functions and oversteps bounds of simple temperature controllers.

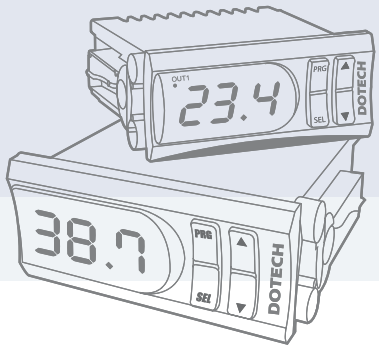
RS485 & 4~20mA Analogue Output Function

Applying for RS485 communication method based on MODBUS RTU/ASCII Protocol,
FX series helps users to construct convenient SCADA/HMI system which is possible for precise central concentrated monitoring with PLC, PC, and touch screen.

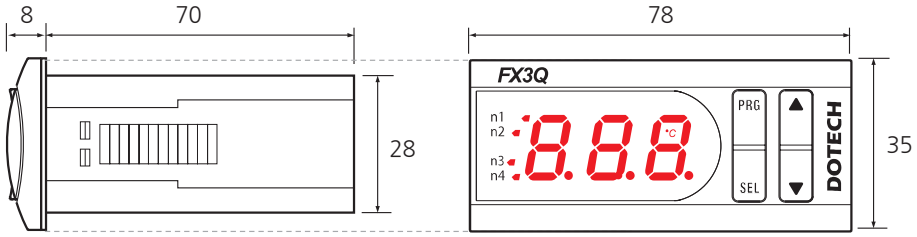
Compatibility for Various Sensors

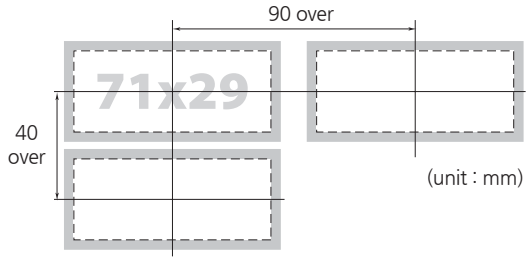
According to request for each system, various types of sensors are applicable including a standard temperature sensor.

Now It's your turn
to experience DOTECH.



Standardized Dimensions (Panel Cut Size : 71 X 29mm)





Selection suitable model with the necessary functions

You can choose model with the functions that you want for your convenience.

Temperature	Humidity	Refrigeration	Multi
FX3S FX3T FX3D FX3QR FX3FS FX3SR	FX3H FX3DH	FX32J FX32K FX32R FX32C FX32PR FX32EV FX32S	FX32P FX32F FX32A FX32A-351

Multi Digital Controller

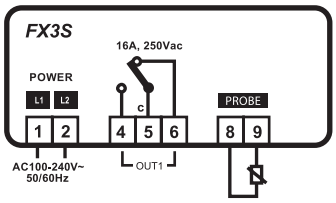
FX Series

01 Digital Temperature Controller

FX3S

Digital Temperature Controller — NTC | Heating | Cooling | Thermostat | Defrost

Main-Function	Heating/cooling output, precise temperature control, sensor correction, sensor error detection, Data backup, min. on/off maintaining time setup, Auto-output operation cycle settable in case of sensor error
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 1point (16A), Temp. sensor input : 1 point (NTC)
Sensor Spec	DPR-TH1 : NTC 5k, ±0.3℃ at 25℃ (-55~105℃) DPR-TH2 : NTC 10k, ±1.5℃ at 25℃ (-50~150℃)
Models	**FX3S-00** : Basic model (with DPR-TH1-ET temperature sensor)



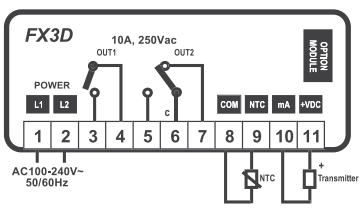
out1 : heating/cooling output

FX3D

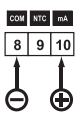
Digital Temperature Controller — NTC | Heating | Cooling | Defrost | 4~20mA | RS485 | Retrans

Main-Function	Heating/cooling output, independent timer output, high/low alarm output, Defrost output, precise temperature control, sensor correction, sensor error detection, Data backup, min. on/off maintaining time setup, RS485 communication (MODBUS), Auto-output operation cycle settable in case of sensor error, transmission output
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 2point (10A), Temp. sensor input : 1 point (NTC) 4~20mA Input : 1 point (including power supply)
Sensor Spec	DPR-TH1 : NTC 5k, ±0.3℃ at 25℃ (-50~105℃) DPR-TH2 : NTC 10k, ±1.5℃ at 25℃ (-50~150℃)
Models	**FX3D – 00** : Basic model (DPR-TH1-ET temperature sensor) **FX3D – R4** : Add on RS485 communication (MODBUS) **FX3D – A1** : Add on 4~20mA transmission output **FX3D – R2** : Add on RS232 communication **FX3D – A1R4** : Add on 4~20mA transmission output, RS485 communication (MODBUS)

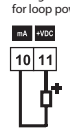
OUT1 : Heating/cooling output
OUT2 : Heating/cooling output
- Timer output
- Sensor error detection alarm output
- Heater defrost output
- Hot gas defrost output



4~20mA signal input



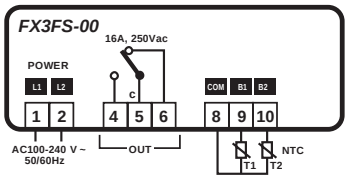
4~20mA wiring method for loop power sensor



FX3FS

Digital Temperature Controller (NTC) (Heating) (Cooling) (Defrost)

Main-Function	Heating/cooling output, precise temperature control, sensor correction, sensor error detection, Data backup, min. on/off maintaining time setup, Defrost output, Virtual input function, function to prevent incorrect operation caused by sensor error
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 1point (16A), Temp. sensor input : 2 point (NTC)
Sensor Spec	DPR-TH1 : NTC 5k, ±0.3℃ at 25℃ (-50~105℃) DPR-TH2 : NTC 10k, ±1.5℃ at 25℃ (-50~150℃)
Models	**FX3FS-00** : Basic model (with 2 pcs of DPR-TH1-ET temperature sensor)

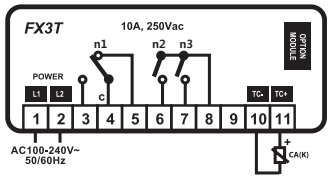


OUT1 : heating/cooling on/off output
Save : T1 - temperature sensor#1
T2 - temperature sensor#2

FX3T

Digital Temperature Controller (CA(K)) (Heating) (Cooling) (RS485) (4~20mA) (Retrans)

Main-Function	Heating/cooling output, high/low alarm output, precise temperature control, Sensor correction, sensor error detection, Data backup, min. on/off maintaining time setup, transmission output, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 3point (10A), Temp. sensor input : 1 point (thermo-couple)
Sensor Spec	Thermo-couple K type : Measuring range : 0 ~ 1000℃
Models	**FX3T-TC-00** : Basic model **FX3T-TC-R4** : Add on RS485 communication (MODBUS) **FX3T-TC-A1** : Add on 4~20mA transmission output **FX3T-TC-R2** : Add on RS232 communication

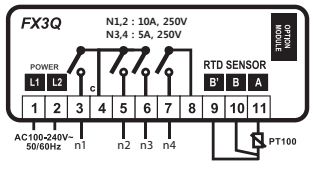


n1 : Heating/Cooling #1 ON/OFF output, alarm output
n2 : Heating/Cooling #2 ON/OFF output, alarm output
n3 : Heating/Cooling #3 ON/OFF output, alarm output

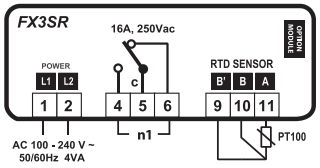
FX3QR / FX3SR

Digital Temperature Controller (PT100) (Heating) (Cooling) (RS485) (4~20mA) (Retrans)

Main-Function	Heating/cooling output, precise temperature control, Data backup, min. on/off maintaining time setup, relay output manually controllable, Transmission output, sensor correction, sensor error detection, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	**FX3QR** : Relay output : 4point, Temp. sensor input : 1 point (Pt100) **FX3SR** : Relay output : 1point (16A), Temp. sensor input : 1 point (Pt100)
Sensor Spec	PT100 3(2) Wire, Measuring range : -200~800℃, ±0.3℃
Models	**FX3QR / FX3SR -00** : Basic model **FX3QR / FX3SR -R4** : Add on RS485 communication (MODBUS) **FX3QR / FX3SR -A1** : Add on 4~20mA transmission output **FX3QR / FX3SR -R2** : Add on RS232 communication



n1 : Heating/Cooling #1 output, event output
n2 : Heating/Cooling #2 output, event output
n3 : Heating/Cooling #3 output, event output
n4 : Heating/Cooling #4 output, event output



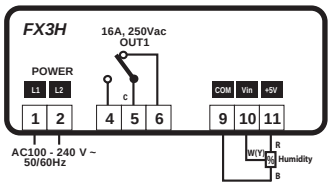
n1 : Heating/Cooling #1 ON/OFF output, event output

02 Digital Humidity Controller

FX3H

Digital Humidity Controller **Humidity**

Main-Function	humidification/dehumidification output, high/low alarm output, min. on/off maintaining time setup, selection on/off output when sensor error occurs, sensor correction, sensor error detection, selection of displaying decimal point
Power Supply	AC100~240V, 50/60Hz, Max. 4VA
Input/output	Relay output : 1point (out1 : 250Vac/16A), Humidity 1~3.6V, input : 1 point
Sensor Spec	HTX20-FTS-502 (Voltage output type humidity sensor), HTX3515
Models	**FX3H-00** : Basic model

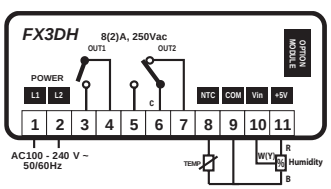


OUT1 : Dehumidification/Humidification
#1 ON/OFF output
COM : Signal input common terminal
Vin : Humidity sensor input
+5V : Power Supply for humidity sensor (5Vdc)

FX3DH

Digital Temp.& Humidity Controller **NTC** **Heating** **Cooling** **Thermostat** **Humidity** **4~20mA** **Retrans**

Main-Function	humidification(heating), dehumidification(cooling) output, high/low alarm output, min. on/off maintaining time setup, selection on/off output when sensor error occurs, sensor correction, sensor error detection, relay output manual control, transmission output, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA
Input/output	Relay output : 2point (out1,2 : 250Vac/8(2)A), Humidity 1~3.6V, power input : 1 point
Sensor Spec	HTX20-FTS-502 (Voltage output type humidity sensor), HTX3515
Models	**FX3DH-00** : Basic model **FX3DH-R4** : Add on RS485 communication (MODBUS) **FX3DH-A1** : Add on 4~20mA transmission output **FX3DH-R2** : Add on RS232 communication



OUT1 : Humidification/dehumidification
#1 ON/OFF output
OUT2 : Humidification/dehumidification
#2 ON/OFF output
COM : Signal input common terminal
Vin : Humidity sensor input
NTC : Temp. sensor input
+5V : Power for humidity sensor(5Vdc)

Temperature & Humidity **Sensor**
Accessories

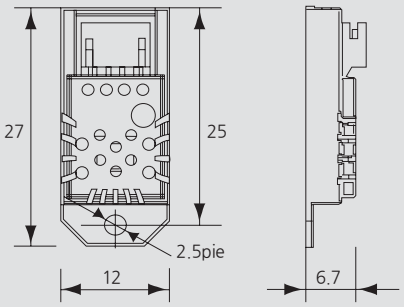
HTX3515 Humidity sensor

▼General Specification

- Measurement Range for humidity : 0~100%RH
- Humidity output : 1~3.6Vdc
- Including cable connection kit : 3m
- Accuracy : ±3%RH at 55%RH
- Power supply : 5V

▼Cable

1	black	Humidity sensor power supply 0V
2	Red	Humidity sensor power supply +5V
4	White	Humidity measurement signal output



HTX20-FTS-502 Temperature & Humidity sensor

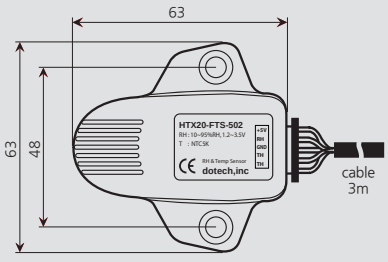
▼General Specification

- Measurement Range for humidity : 10~95%RH
- Measurement Range for temperature : 0~60℃
- Humidity output : 1~3.6Vdc
- Temperature output : NTC5K B3324K
- Accuracy : ±2%RH, ±0.3℃
- Power supply : 5V

▼Cable

Black	Humidity sensor power supply 0V
Red	Humidity sensor power supply +5V
Yellow	Humidity measurement signal output
White	Temperature sensor (NTC5K)
Blue	Temperature sensor (NTC5K)

※cable length : 3m



Multi Digital Controller

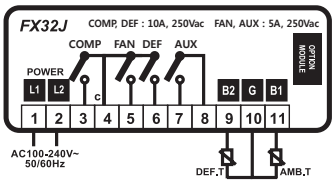
FX Series

03 Refrigeration Controller

FX32J

Showcase & Coldroom Controller (NTC) (RS485) (4~20mA) (Retrans)

Main-Function	Defrosting (auto/manual), fan control, efficient delay Room temperature sensor : 1EA, Defrost recovery sensor : 1EA. High (low) temp. alarm output, room temp. transmission output (4~20mA), RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 4 point, Temp. sensor input : 2 point
Sensor Spec	DPR-TH1 : NTC 5k, ±0.3℃ at 25℃ (-50~105℃)
Models	**FX32J – 00** : Basic model **FX32J– R4** : Add on RS485 communication (MODBUS) **FX32J– A1** : Add on 4~20mA transmission output **FX32J– L1** : adopted printer for recoder **FX32J– L2** : added data logger function **FXP-60** : recording printer for FX32J-L1



Comp: compressor(SOL) control output
Fan: fan control outout
Def: defrosting control output
AI/aux: alarm/defrosting synchronization/ heating control output

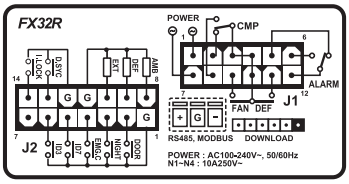
AMB.T : inside temperature sensor
DEF.T : sensor for return temperature after sensor for defrost recovery

FX32R

Showcase & Coldroom Controller (NTC) (RS485)

Main-Function	Defrosting (auto/manual), defrosting stop delay, evaporation fan control and delay, Air inlet/outlet sensor : 2EA, Defrost recovery sensor : 1EA, virtual temp. sensor computing, Door open alarm, emergency call, interlock, defrost activation, night operation, High (low) temp. alarm output, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 8VA, connector (Molex)
Input/output	Relay output : 4 point, Digital input : 7 point, Temp. sensor input : 3 point
Models	**FX32R– 00** : Basic model **FX32R– R4** : Add on RS485 communication (MODBUS)

ID1-D.SYC: defrosting syncronization signal input
ID2-I.LOCK: interlock signal input
ID3-FAN.AL: fan alarm signal input
ID4-EMG.C: emergency(locking) switch signal input
ID5-NIGHT: NIGHT SETBACK signal input
ID6-DOOR: door open switch signal input
ID7-REMOTE : remote operation stop signal input



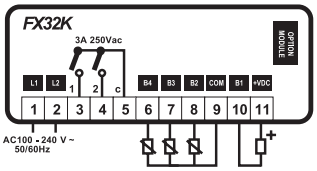
Comp: compressor(SOL) control output
Fan: fan control outout
Def: defrosting control output
AI/aux: alarm/defrosting synchronization/ heating control output

B1-AMB : inside temperature sensor
B2-DEF : sensor for return temperature after sensor for defrost recovery
B3-EXT : outlet temperature sensor

FX32K

Defrost factor Controller (Defrost) (4~20mA) (RS485)

Main-Function	Efficient defrosting in geothermy heat pump system Defrosting execution by measuring of ambient humidity and temperature
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 2 point, Digital input : 1 point, Temp. sensor input : 2(3) point, humidity sensor input : 1point
Models	**FX32K–00** : Basic model **FX32K–30** : Add on humidity sensor **FX32K–30-R4** : Add on RS485 communication (MODBUS)



B1 : Ambient humidity 4~20mA input
B2 : Ambient temperature sensor input
B3 : Refrigerant suction temperature sensor input
ID1 : Interlock signal

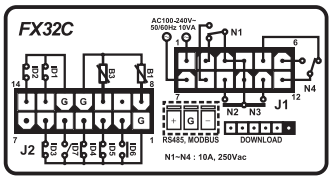
Def : Defrost ON/OFF output
Al/aux : Alarm output

FX32C

Compressor Protector (NTC) (RS485)

Main-Function	Total control and detection (protection) for freezers Function of start, restart, pump down, alarm delay timer, discharge gas detection (high & low Temp.), Individual alarm message (OC, HP, LP, OP, INT, etc.), Liquid injection (discharge gas detection), communication (RS485 MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 8VA, connector (Molex).
Input/output	Relay output : 4 point, Digital input : 7 point temp. sensor input : 3 point
Models	**FX32C–00** : Basic model **FX32C–30** : Add on discharge gas detection and control **FX32C–40** : Add on discharge gas and room temp. control **-00** : Without Communication function **-R4** : Add on RS485 communication (MODBUS RTU/ASCII MODE)

ID1 : OCR
ID2 : INT
ID3 : HPS
ID4 : OPS / PMR
ID5 : LPS
ID6 : INTERLOCK
ID7 : RUN/STOP



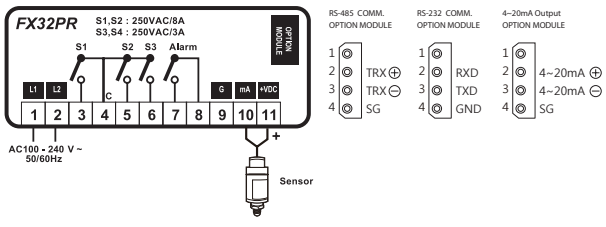
Comp : COMP RUN/STOP
Sol : SOL V/V ON/STOP
Inj : INJECTION SOL
Al/aux : Alarm

B1 : AMBIENT TEMP
B2 : SPARE
B3 : DISCHARGE GAS TEMP

FX32PR

Digital Low/High Pressure Controller (4~20mA) (RS485) (Retrans)

Main-Function	uniform step control, operation with intelligent shift high/low alarm output, sensor correction, sensor error detection, transmission output, communication (RS485 MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA
Input/output	One sensor input of 4~20mA (embedded sensor loop power), Four relays (three relays for step control, one relay for alarm output)
Sensor Spec	DP506.930A : -1~9 bar, 4~20mA, 2wire (For refrigeration application) DP506.933A : 0 ~ 30 bar, 4~20mA, 2wire (For refrigeration application) DP510 : 0 ~ 16 bar, 4~20mA, 2wire (exclusive pressure sensor for air compressor)
Models	**FX32PR–00** : Basic model **FX32PR–R4** : Add on RS485 communication (MODBUS) **FX32PR–A1** : Add on 4~20mA transmission output



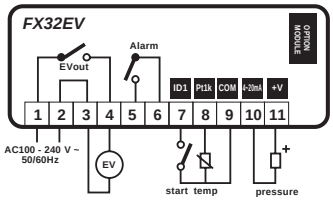
Multi Digital Controller

FX Series

FX32EV

Electronic Expansion Valve controller **Pt1000** **4~20mA** **RS485** **Retrans**

Main-Function	PID degree of superheat control through defense and safety compensation, degree of superheat control for various refrigerant, PWM(opening ratios control), remote operation, transmission output, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	SSR output 1-point (expansion valve on/off), relay ouput 1-point(alarm port), temperature sensor 1-point, 4~20mA pressure sensor input 1-point (embedded sensor loop power)
Sensor Spec	Temp. sensor (DPR-PT1K-P6D5OL, -100~100℃) Pressure sensor (-1~9 bar or 0~30 bar)
Models	**FX32EV– 00** : Basic model **FX32EV– R4** : Add on RS485 communication (MODBUS) **FX32EV– A1** : use for 4~20mA type Electronic Expansion Valve or pressure transmission output function **FX32EV– R2** : Add on RS232 communication



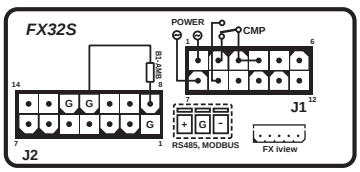
FX32S series

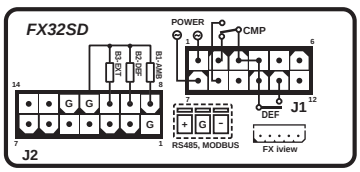
Showcase & Coldroom Controller **NTC** **RS485**

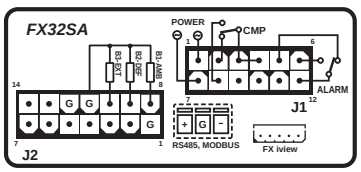
Main-Function	Defrosting (auto/manual), defrosting stop delay, two air inlet and outlet sensors, one sensor for defrost recovery, High(low) alarm output, RS485 communication (MODBUS), indicator(FxiView) connection
Power Supply	AC100~240V, 50/60Hz, Max. 8VA, connector (Molex)
Input/output	relay output max 4-point, temperature sensor input max 3 point
Sensor Spec	DPR-TH1 : NTC 5k, ±0.3℃ at 25℃ (-50~105℃)

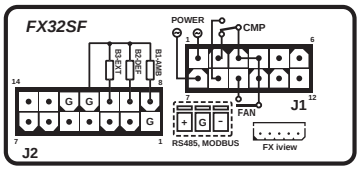
Models	FX32S	FX32SD	FX32SA	FX32SF	FX32SB	FX32SR
Compressor	16A	16A	16A	16A	16A	8A
Defrost	-	8A	-	-	8A	8A
Eva Fans	-	-	-	8A	8A	8A
Aux.output	-	-	8A	-	-	8A
Room Temp.	●	●	●	●	●	●
Defrost Temp.	-	●	●	●	●	●
Digital Input (Probe3)	-	●	●	●	●	●
RTC	-	-	-	-	-	-
RS485	◎	◎	◎	◎	◎	◎

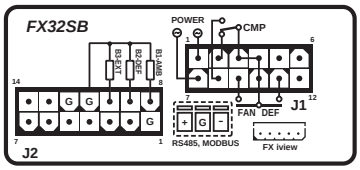
● : Basic
◎ : Option

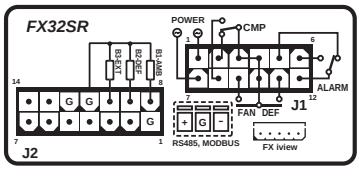


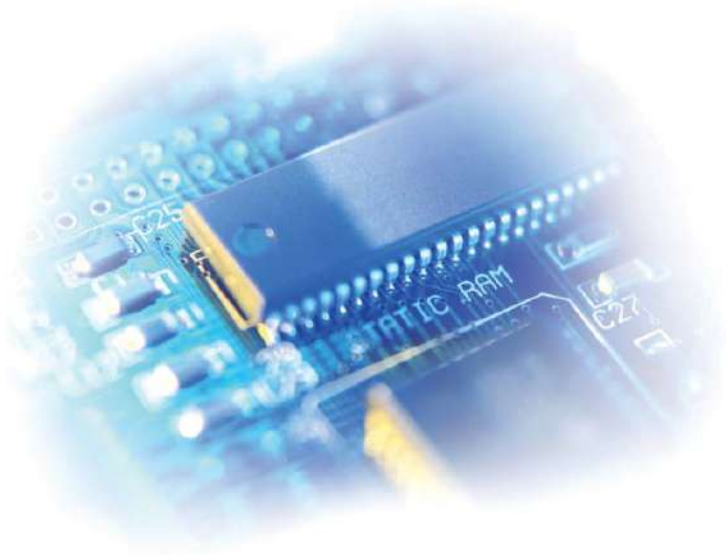










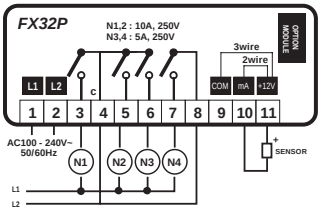


Multi-function Digital Controller 04

FX32P

Pressure Switch Controller (4~20mA) (RS485) (Retrans)

Main-Function	Output controllable based on measured pressure value (increase and decrease), Alternative operation available between freezing exclusive model and booster, pump unit control exclusive model, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input /output	Pressure sensor input : 1 point (including power supply) Relay output : 4 point
Sensor Spec	4~20mA (2 wire or 3 wire)
Models	**FX32P– 00** : Basic model **FX32P– R4** : Add on RS485 communication (MODBUS) **FX32P– A1** : Add on 4~20mA transmission output

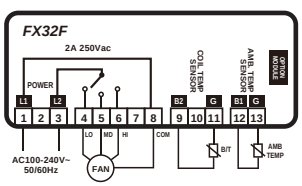


N1 : decrease pressure / increase pressure
#1 ON/OFF output, event output
N2 : decrease pressure / increase pressure
#2 ON/OFF output, event output
N3 : decrease pressure / increase pressure
#3 ON/OFF output, event output
N4 : decrease pressure / increase pressure
#4 ON/OFF output, event output

FX32F

Fan Coil Unit Controller (NTC) (Heating) (Cooling) (RS485)

Main-Function	3 stage fan speed controllable, 4 kind (stop/high/middle/low) airflow choosable, Unification of temp. control function, Data backup, self-diagnostic, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, connector
Input/output	Relay output : 3point (airflow control), Temp. sensor input : 2 point (room & water)
Sensor Spec	DPR-TH1 : NTC 5k, ±0.3℃ at 25℃ (-50℃~105℃)
Models	**FX32F– 00** : Basic model **FX32F– R4** : Add on RS485 communication (MODBUS)



LO : low wind speed on/off output
MD : midium wind speed on/off output
HI : high wind speed on/off output

G : signal input common terminal
B1 : Ambient temperature sensor input
B2 : coil temerature sensor input

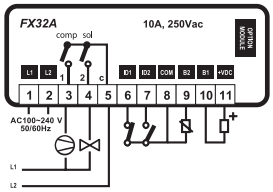
Multi Digital Controller

FX Series

FX32A

Air Compressor Controller NTC 4~20mA RS485 Retrans

Main-Function	Embedded run/stop switch, motor on/off, load run, auto-stop, manual stop, Operation delay, load delay, embedded timer, pressure/temperature high level, Temperature low level (standby for starting), Interlock input signal (emergency switch, OCR reverse phase) Hour meter (total run hours/loaded hours/PM cycle/PM exceeded time), self-diagnostic, Usable for thermometer and manometer, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 2point (motor, SOL) Digital input : 2 point (interlock, remote control) Temp. sensor input : 1 point (discharge air temperature) Pressure sensor input : 1 point (discharge air pressure)
Sensor Spec	DPR-TH2 : NTC 10k, ±0.3℃ at 25℃ (-50~150℃)
Models	**FX32A– 00** : Basic model **FX32A– R4** : Add on RS485 communication (MODBUS) **FX32A– A1** : Add on 4~20mA transmission output **FX32A– R2** : Add on RS232 communication



Comp : main motor on/off output
Sol : LOAD SOL ON/OFF output

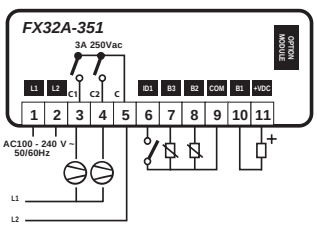
B1 : pressure sensor input signal
B2 : temperature sensor input signal

ID1 : control output interlock signal(OCR, EMSW)
ID2 : remote run / stop control signal

FX32A-351

Air Compressor Controller NTC 4~20mA RS485 Retrans

Main-Function	Embedded run/stop switch, motor on/off, load run, auto-stop, manual stop, Operation delay, load delay, embedded timer, pressure/temperature high level, Temperature low level (standby for starting), Interlock input signal (emergency switch, OCR reverse phase) Hour meter (total run hours/loaded hours/PM cycle/PM exceeded time), self-diagnostic, Usable for thermometer and manometer, RS485 communication (MODBUS)
Power Supply	AC100~240V, 50/60Hz, Max. 4VA, screw bolt terminals
Input/output	Relay output : 2point (motor, SOL) Digital input : 2 point (remote control, interlock) Temp. sensor input : 1 point (discharge air temperature) Pressure sensor input : 1 point (discharge air pressure)
Sensor Spec	Pressure Sensor : 0~16 bar (4~20mA) DPR-TH2 : NTC DPR-TH503 ET
Models	**FX32A-351-00** : Basic model **FX32A-351-R4** : Add on RS485 communication (MODBUS) **FX32A-351-A1** : Add on 4~20mA transmission output **FX32A-351-R2** : Add on RS232 communication



ID1 : remote run/stop signal

C1 : COMP1 motor ON/OFF output
C2 : COMP2 motor ON/OFF output

B1 : pressure sensor input signal
B2 : COMP1 temp. sensor input signal
B3 : COMP2 temp. sensor input signal

FX Series Specification Hardware Comparison per Each Model

Section	Rated Power	Power Consu-mption	Sensor Input	Analogue Input	Analogue output (option)	Digital Input	Digital output	Commu-nication Port(option)	Field of application
FX3S (NTC)	AC100-240V~ 50/60Hz	Max. 4VA	NTC 1P	-	-	-	16A 250Vac 1P	-	wine seller, flower refrigerator, refrigerator, deep freezer etc. places where need to be controlled temperature, humidity and pressure
FX3D (NTC,4~20mA)			NTC 1P	4~20mA 1P	4~20mA 1P	-	10A 250Vac 2P	RS485	
FX3FS (NTC)			NTC 2P	-	-	-	16A 250Vac 1P	-	
FX3T (Thermo-Couple)			TC(K)1P	-	4~20mA 1P	-	10A 250Vac 3P	RS485	
FX3QR (RTD)			Pt100 1P	-	4~20mA 1P	-	5A 250Vac 2P 10A 250Vac 2P	RS485	
FX3SR (RTD)			Pt100 1P	-	4~20mA 1P	-	16A 250Vac 1P	RS485	for precision
FX3H (Humidity)			-	1~3.6V 1P	-	-	16A 250Vac 1P		Humidity Control
FX3DH (Temp.& Humidity)			NTC 1P	1~3.6V 1P	4~20mA 1P	-	8(2)A 250Vac 2P	RS485	
FX32J (Showcase & Coldroom)		Max. 4VA	NTC 2P	-	4~20mA 1P	-	5A 250Vac 2P 10A 250Vac 2P	RS485	showcase, low temperature warehouse, deep freezer
FX32R (Showcase & Coldroom)		Max. 8VA	NTC 3P	-	-	7P	10A 250Vac 4P	RS485	
FX32K (Defrost)		Max. 4VA	NTC 2(3)P Humidity 1P	-	-	1P	3A 250Vac 2P	RS485	Heat pump
FX32C (Compector)		Max. 8VA	NTC 3P	-	-	7P	10A 250Vac 4P	RS485	Refrigeration
FX32PR -		Max. 4VA	-	4~20mA 1P	4~20mA 1P	-	8A 250Vac 2P 3A 250Vac 2P	RS485	High/Low Pressure Control
FX32EV -		Max. 4VA	Pt1000 1P	4~20mA 1P	4~20mA 1P	1P	SSR 1P	RS485	Electronic Expansion Valve
FX32S seires -		Max. 8VA	NTC 2(3)P	-	-	2P	5~16A 250Vac 4P	RS485	Showcase
FX32P (Pressure Switch)		Max. 4VA	-	4~20mA 1P	4~20mA 1P	-	10A 250Vac 2P 5A 250Vac 2P	RS485	pressure control device
FX32F (Fan-coil Unit)			NTC 2P	-	-	-	2A 250Vac 3P	RS845	Fan coil
FX32A (Air-Compressor)			NTC 1P	4~20mA 1P	4~20mA 1P	2P	10A 250Vac 2P	RS485	Air Compressor
FX32A-351 (Air-Compressor)			NTC 2P	4~20mA 1P	4~20mA 1P	2P	3A 250Vac 2P	RS485	

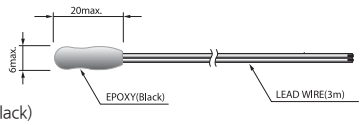
Multi Digital Controller

FX Series

Temperature Sensor Specification

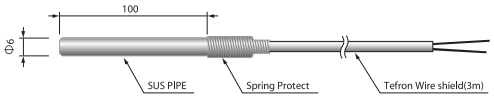
DPR-TH1-AT5

Sensor type : NTC 5KΩ
Range : -50 ~ 105℃
Accuracy : ±0.3℃ at 25℃
Sheath : Φ6 X 20mm
Cable : 2C X 0.5mm, EPOXY(Black)



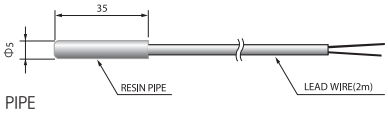
DPR-TH2-P6D-100L

Sensor type : NTC 10KΩ
Range : -50 ~ 150℃
Accuracy : ±1.5℃ at 25℃
Sheath : Φ6 X 100mm, SUS
Protection : IP67
Cable : 2C X 0.5mm, sus-mesh shield tefron



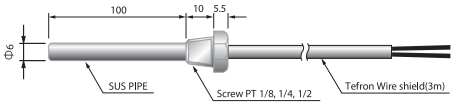
DPR-TH1-RT

Sensor type : NTC 5KΩ
Range : -50 ~ 105℃
Accuracy : ±0.3℃ at 25℃
Sheath : Φ5 X 35mm
Cable : 2C X 0.5mm, RESIN PIPE



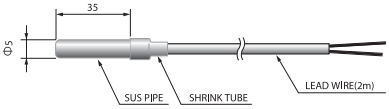
DPR-TH1-S6D100L

Sensor type : NTC 5KΩ
Range : -50 ~ 105℃
Accuracy : ±0.3℃ at 25℃
Sheath : Φ6 X 100mm, SUS
Protection : IP67
Cable : 2C X 0.5mm, sus-mesh shield tefron



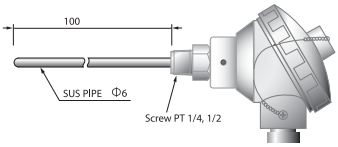
DPR-TH1-ET

Sensor type : NTC 5KΩ
Range : -50 ~ 105℃
Accuracy : ±0.3℃ at 25℃
Sheath : Φ5 X 35mm, SUS
Cable : 2C X 0.5mm



DPR-TH1-H6D100L

Sensor type : NTC 5KΩ
Range : -50 ~ 105℃
Accuracy : ±0.3℃ at 25℃
Sheath : Φ6 X 100mm, SUS
Protection : IP67
Cable : 2C X 0.5mm



Temperature/Humidity Sensor Specification

HTX23 - FHC

Sensor type : Humidity sensor
Range : 0~100%RH (4~20mA)
Cable : UL 2547 X 2C X 2m, AWG24
Housing : PC ABS

HTX23 - FBS-502

Sensor type : Temperature sensor NTC 5KΩ
Range : -20~80℃
Cable : UL 2547 X 2C X 2m, AWG24
Housing : PC ABS

HTX23 - FPC - 502

Sensor type : Temperature & Humidity sensor
Range : 0 ~ 100%RH, -20~80℃ (NTC 5KΩ)
Cable : UL 2547 X 4C X 2m, AWG24
Housing : PC ABS

HTX23 - FBS - PT100

Sensor type : Temperature sensor PT100
Range : -20 ~ 80℃
Cable : UL 2547 X 3C X 2m, AWG24
Housing : PC ABS

Pressure Sensor Specification

DP510

Measuring range : 0 ~ 16bar, 4~20mA
Accuracy : Within 1%FS
Size : Small type
Temperature Range : -40 ~ 125℃
Applications :
Automobiles & Heavy Equipments,
Oil & Air Pressure Systems, Compressors,
Industrial Engines, Pump Pressure Controls

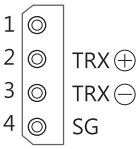
506.933A/506.930A

DOTECH OEM Model : 506.933A - For High Pressure (0~30bar)
DOTECH OEM Model : 506.930A - For Low Pressure (-1~9bar)

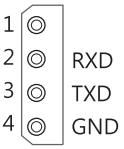
- Measuring pressure in pipe (water, oil, gas)
- Applying for all the refrigerants including ammonia (for freezing)
- EMC conformity
- Accuracy : ±0.5% FS
- Using Temperature : -15 ~ 80℃
- Insulation Class : IP65
- Output : 0~5V, 8~33VDC, 3wire
0~10V, 11.4~33VDC
16~34VDC/24VAC
4~20mA, 8~33VDC, 2wire

Option Specification

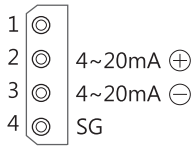
RS-485 COMM.
OPTION MODULE



RS-232 COMM.
OPTION MODULE



4~20mA Output
OPTION MODULE



4~2mA Output & RS485 COMM.
OPTION MODULE