



VB Electronics & Controls

16.Sarathy Nagar, Opposite to Vijayanagar Bus Stand, Velachery, Chennai - 600 042, India.

Phone: +91 44 22430195, Mobile: +91 999 486 0545

EMail: vbecdirector@gmail.com Web: www.vbec.in

TAIE FY Series Competitive Analysis

	TAIE	Watlow	Omron	RKC	FUJI
Model	FY series	SD Series	E5 Series	CB Series	PXY Series
Panel Cutout	1/16th DIN, 1/8th DIN, 1/4DIN,	1/16thDIN, 1/8th DIN, 1/4DIN, 1/32nd DIN	1/16thDIN, 1/8th DIN, 1/4DIN, 1/32nd DIN	1/16thDIN, 1/8th DIN, 1/4DIN, 3/16th DIN	1/16thDIN, 1/8th DIN, 1/4DIN
User Interface	5 Keys+Barograph	4 keys	4 keys	4 keys	3 or 8 keys
Display	2*4digits7segmentsLEDs	2*4digits7segmentsLEDs	2*4digits7segmentsLEDs	2*4digits7segmentsLEDs	2*4digits7segmentsLEDs
Accuracy	0. 2%	0. 1%	0. 5%	0. 3%	0. 5%
Control Output	3 Amp Relay,SSR Driver, mA, Volts	2-5 Amp Relay,SSR Driver, mA, Volts	5 Amp Relay,SSR Driver, mA	3 Amp Relay,SSR Driver, mA, Volts	3 Amp Relay,SSR Driver, mA, Volts
Alarms	Up to 3	Up to 2	Up to 3	Up to 2	1
Thermocouple Inputs	J,K,T,L,S,R,N,B,E,W,U	J,K,T,S,R,N,B,E,N	J,K,T,L,S,R,N,B,E,N,U	J,K,T,S,R,L,B,E,N,W,U	J,K,T,S,R,B,E,N
RTD Inputs	PT100,PT50	PT100	PT100	PT100	PT100
Linear Inputs	0-20ma,4-20ma,0-5v,0-10v,1-5v,2-10v	0-20ma,0-10v	0-50mv	0-20ma,4-20ma,0-5v,1-5v	0-20ma,4-20ma,0-5v,1-5v
Engineering Units	F/C	F/C	F/C	F/C	F/C
Power Supply	85/265 Vac	100/240 Vac	100/240 Vac	85/264 Vac	85/264 Vac
Algorithm	On/Off,PID,Heat/Cool,TPSC	On/Off,PID,Heat/Cool	On/Off,PID,Heat/Cool,TPSC	On/Off,PID,Heat/Cool	On/Off,PID,Heat/Cool
NEMA Rating	IP65(Pending)	Nema4x/IP65	Nema4x/IP66	IP66(optional)	Nema4x
CE Mark Approved	Yes	Yes	Yes	Yes	Yes
Approval Bodies	--	UL,C-UL,CSA	UL,CSA	UL,CSA	UL,CSA
Case Depth	80mm	97,8mm	78mm	100mm	85,7mm
SP Program Control	2 programs,8 segments each	None	None	None	1 program,8 segments
Communication	TTL, RS232, MODBUS, RS485, MODBUS	RS485	RS-485,RS-232C	RS485	RS485



TAIE & Others Brand Comparison Table

	Comparison Item	TAIE FY & FU Series	RKC CB Series	OMRON E5 Series	NAIS KT Series	YOKOGAWA UT100 Series	YAMATAKE SDC15	WATLOW SD Series
Appearance	Panel Cutout	1/16 DIN,3/16 DIN,1/8 DIN,1/4 DIN	1/16 DIN,3/16 DIN,1/8 DIN,1/4 DIN	1/16DIN,1/8 DIN,1/4 DIN	1/16DIN,1/8DIN,1/4 DIN,1/32DIN	1/16DIN,1/8DIN,1/4 DIN	1/16DIN	1/16DIN,3/16DIN,1/8 DIN,1/4DIN
	Case Depth	80mm	100mm	78mm	98.5mm	100mm	60mm	97.8mm(1/4DIN=101.1mm)
	Body color	Black/ White	Black,White	Black,White	White	Black	White	Red Green,Red Red
	User Interface	5 keys+Bargraph	4 keys	4 keys	4 keys	4 keys	4 keys	4 keys
	Display	2*4digits 7 segments LED	2*4digits 7 segments LED	2*4digits 11 segments liquid crystal	2*4digits 7 segments LED	2*4digits 7 segments LED	2*4digits 7 segments LED	2*4digits 7 segments LED
	Terminal Arrangement	5/7/10 screws in single column	6/9/12 screws in single column	5/10 screws in single column	5/10 screws in single column	5/10 screws in single column	6 screws in single column	***
	Panel Mounting	Clamps	clamps only or clamps+screws	clamps+screws	clamps only or clamps+screws	clamps only or clamps+screws	clamps+screws	clamps+screws
	Decimal point position	00,0,0,0.00,0.000	00,0,0,0.00,0.000	00,0,0,0.00,0.000	00,0,0,0.00,0.000	00,0,0,0.00,0.000	00,0,0,0.00,0.000	00,0,0,0.00,0.000
Engineering Units	`C,`F,A	`C,`F	`C,`F	`C,`F	`C,`F	`C,`F	`C,`F	
Input	Input Channel	1 channel	1 channel	1 channel	1 channel	1 channel	1 channel	1 channel
	Accuracy	0.2%	0.3%	0.5%	0.2%	0.30%	0.5%	0.1%
	Input Type	TC,RTD,Linear	TC,RTD,Linear	TC,RTD,Linear	TC,RTD,Linear	TC,RTD,Linear	TC,RTD,Linear	TC,RTD,Linear
	TC	K,J,R,S,B,E,N,T,W,PL2,U,L	K,J,R,S,B,E,T,N,U,L,W	K,J,T,E,L,U,N,R,S,B	K,J,R,S,B,E,T,N,PL2,W	K,J,T,E,R,S,B,N,L,U	K,J,T,E,R,S,B,N,W,U,L	K,J,T,E,R,S,B,N,W,U,PL2
	RTD	PT100,JPT100,JPT150	PT100,JPT100	PT100,JPT100	PT100,JPT100	PT100,JPT100	PT100,JPT100	PT100
	Linear	0-10mv,0-20mv,0-50mv,0-20ma,4-20ma,0-1v,0-5v,0-10v	0-20ma,4-20ma,0-5v,1-5v,0-10v	4-20ma,0-20ma,1-5v,0-5v,0-10v	0-20ma,4-20ma,0-1V,0-5v,1-5v,0-10v	0-100mv,0-5v,1-5v,0-10v	0-20ma,4-20ma,0-1V,0-5v,1-5v,0-10v	0-20mv,0-50mv,0-20ma,4-20ma,1-5v,0-5v,0-10v
	Sample Time	250ms	500ms	250ms	250ms	500ms	500ms	150ms
	Universal Input	YES	NO	YES	YES	YES(UT130 RTD,TC)	NO	YES
Input Digital fitter	0-1000	NO	NO	0.0-10.0(SEC)	1-120(SEC)	0.0-120.0(SEC)	0.0-60.0(SEC)	
Resolution	14bit	***	***	***	***	***	***	
Control	Control Algorithm	PID,FUZZY,ON/OFF,TPSC,HEAT/COOL	PID,ON/OFF,HEAT/COOL	PID,ON/OFF,HEAT/COOL	PID,ON/OFF,HEAT/COOL	PID,ON/OFF,HEAT/COOL	PID,ON/OFF,HEAT/COOL	PID,ON/OFF,HEAT/COOL
	Self Tuning	NO	YES	YES	NO	NO	YES	NO
	Alarm Modes	18types	16types	12 types	12 types	25 types	14 types	2 types
	Control Loop	single loop	single loop	single loop	single loop	single loop	single loop	single loop
	Cascade Control	NO	NO	NO	NO	NO	NO	NO
	Universal Output	YES	NO	NO	NO	NO	NO	YES(optional)
	Control Output	Relay, SSR Driver, Linear, Trigger Output	Relay SSR Driver, Linear	Relay SSR Driver, Linear	Relay SSR Driver, Linear	Relay SSR Driver, Linear	Relay SSR Driver, Linear	Relay SSR Driver, Linear
	Motor Valve Control	YES	NO	NO	NO	NO	NO	NO
Auto/Manual	YES	NO	YES	YES	NO	YES	YES	
Option	Limit Control	NO	NO	NO	NO	YES(UP150L)	NO	NO
	SP Program Control	2 patten with 8 segments each	NO	NO	NO	1 pattern with 16 segments each(UP150)	NO	NO
	Remote Input	Available for SV remote	NO	NO	NO	NO	NO	NO
	Retransmission	Available for PV, SV	NO	NO	NO	Avadable for PV(only up150 type)	NO	Avadable for PV,SV
	HBA Function	YES(CT is included)Single phase	YES(CT is optional)Single phase	YES(CT is optional)Single or Three phase	YES(CT is optional)Single phase	YES(CT is optional)Single phase	YES(CT is optional)Single or Three phase	NO
	LBA Function	NO	YES	YES	NO	NO	NO	NO
	DI(Contact Input)	NO	NO	Max=2	NO	Max=2	Max=2	NO
	Alarms	Max=3	Max=2	Max=3	Max=2	Max=2	Max=3	Max=3
	Timer	NO	NO	NO	NO	Max=1	NO	NO
	Infrared Communicat	NO	NO	NO	NO	NO	NO	YES
Communicaton	TTL, RS232, MODBUS, RS485, MODBUS	RS485, MODBUS	RS485, MODBUS, RS232C, MODBUS	RS485, MODBUS	RS485, MODBUS	RS485, MODBUS	RS485, MODBUS	
Protool	Modbus(RTU,ASC11) TAIE	Modbus(RTU)ANSI*3.28	Modbus(RTU)ANSI*3.28 Modbus(RTU)Compowayr(syswa y)	Modbus(RTU ASCLL)	Modbus(RTU ASCLL)yokogawa pe-link yokogawa ladder communicator	Modbus(RTU ASCLL)CPL	Modbus(RTU)	
Operating condition	Operating temperature	0-50°C	0-50°C	10-55°C	0-50°C	-25-70°C	0-50°C	-18-65°C
	Humidity Range	20-90%RH	20-85%RH	25%-85%RH	35%-85%RH	5%-95%RH	20-90%RH	0-90%RH
	IP Rating	IP65	IP65	IP66	IP66	IP65	IP66	IP65
	Approvals	CE	CE,UL,CSA	CE,UL,CSA	CE,UL,CSA	CE,UL,CSA	CE	CE,UL,CSA,C-UL
	Frequency	50/60HZ	50/60HZ	50/60HZ	50/60HZ	50/60HZ	50/60HZ	50/60HZ
	Supply voltage	AC85-265V,DC15-50V	AC100-240V,AC24V,DC24V	AC100-240V,DC24V	AC100-240V,AC24V,DC24V	AC100-240V,AC24V,DC24V	AC100-240V,DC24V	AC100-240V,AC24-28V,DC100-240V,DC24-28V