Product line-up

Digital Indicating Controller UT55A / UT52A / UT35A / UT32A

Model			UT55A	UT52A	UT35A	UT32A
						
Size	1/4 DIN		✔	—	✔	—
	1/8 DIN		—	✔	—	✔
	Depth from the panel surface (mm)		65	65	65	65
Control Scan Period	(msec)		Choice 50/100/200	Choice 50/100/200	200	200
Display Function	Number of PV Display Digits		5	5	5	5
	Active Color PV Display Function		✔	✔	✔	✔
	Guide Scroll Display Function		✔	✔	✔	✔
	Message Display Function		✔	✔	✔	✔
	Bar graph display (Number)		✔ (2)	✔ (2)	✔ (1)	✔ (1)
PV Input Indication Accuracy	(% of F.S.)		0.1	0.1	0.1	0.1
PV Input Type	TC		✔	✔	✔	✔
	RTD (3-wire)		✔	✔	✔	✔
	RTD (4-wire)		✔	✔	—	—
	mV, V		✔	✔	✔	✔
	mA		✔	✔	✔	✔
Number of Analog Inputs	Standard (Maximum)		1 (4)	1 (2)	1	1
Number of SPs (PIDs)	Maximum		8	8	4	4
Number of Control Modes	Maximum		8	8	1	1
Number of Control Types	Maximum		8	8	5	5
Control Output	Type	Relay Contact Output, Voltage pulse output, Current output	✔	✔	✔	✔
	Algorithm	ON/OFF	✔	✔	✔	✔
		PID (Continuance, Time Proportion)	✔	✔	✔	✔
		Position proportional	✔	✔	✔	✔
		Heating / cooling	✔	✔	✔	✔
Number of Analog Outputs	Standard (Maximum)		2 (3)	2 (3)	2	2
Number of Digital Inputs	Standard (Maximum)		3 (9)	3 (5)	2 (7)	2 (4)
Number of Alarms			8	8	4	4
Number of Digital Outputs	Standard (Maximum)		3 (18)	3 (5)	3 (8)	3 (5)
Communication	RS-485 communication (Maximum)		✔ (2)	✔ (1)	✔ (1)	✔ (1)
	Ethernet communication		✔	—	✔	—
	Open Network (CC-Link/PROFIBUS-DP /DeviceNet)		✔	—	✔	—
Various Function	Quick Setting Function		✔	✔	✔	✔
	Split Computation Output Function		✔	✔	—	—
	Ratio and Square Root Extraction Function		✔	✔	—	—
	Remote SP Function		✔	✔	—	—
	24 V DC Loop Power Supply Function		✔	✔	✔	✔
	Heater Break Alarm Function		✔ (Standard type)	✔ (Standard type)	✔ (Standard type or Heating/cooling type)	✔ (Standard type or Heating/cooling type)
Ladder Sequence Function	(Number of max. steps)		✔ (500)	✔ (500)	✔ (300)	✔ (300)
Other Specifications	Power Supply	AC100 V to 240 V	✔	✔	✔	✔
		AC/DC 24 V	✔	✔	✔	✔
	Dust and waterproof Level of Front Panel		NEMA4*1 (IP56)	NEMA4*1 (IP56)	NEMA4*1 (IP56)	NEMA4*1 (IP56)
	Configuration Tool	Via Light-loader Communication	✔	✔	✔	✔
		Via Maintenance Port Communication	✔	✔	✔	✔
		Via RS-485/Ethernet communication	✔ / ✔	✔ / —	✔ / ✔	✔ / —

The table above includes specifications of the standard models only.

* 1: Hose down test only.

Input Range

Input type	
TC	K, J, T, B, S, R, N, E, L, U, W PL-2, PR20-40, W97Re3-W75Re25
RTD	JPt100, Pt100
DC Voltage	0.4 to 2.0 V, 1.0 to 5.0 V, 0.0 to 2.0 V, 0 to 10 V, -10 to 20 mV, 0 to 100 mV
DC Current	4 to 20 mA, 0 to 20 mA

Program Controller UP55A / UP35A, Digital Indicator with Alarms UM33A



Model			UP55A	UP35A	UM33A
Size	1/4 DIN		✔	✔	—
	1/8 DIN		—	—	✔
	Depth from the panel surface (mm)		65	65	65
Control Scan Period	(msec)		Choice 100/200	200	Choice 50/100/200
Display Function	Number of PV Display Digits		5	5	5
	Active Color PV Display Function		✔	✔	✔
	Guide Scroll Display Function		✔	✔	✔
	Message Display Function		✔	✔	✔
	Bar graph display (Number)		✔ (2)	✔ (1)	—
PV Input Indication Accuracy	(% of F.S.)		0.1	0.1	0.1
PV Input Type	TC		✔	✔	✔
	RTD (3-wire)		✔	✔	✔
	RTD (4-wire)		✔	—	—
	mV, V		✔	✔	✔
	mA		✔	✔	✔
Number of Analog Inputs	Standard (Maximum)		1 (4)	1	1
Number of SPs (PIDs)	Fixed		8	4	—
Number of Control Modes	Maximum		5	1	—
Number of Control Types	Maximum		4	4	—
Control Output	Type	Relay Contact Output, Voltage pulse output, Current output	✔	✔	—
	Algorithm	ON/OFF	✔	✔	—
		PID (Continuance, Time Proportion)	✔	✔	—
		Position proportional	✔	✔	—
		Heating / cooling	✔	✔	—
Number of Analog Outputs	Standard (Maximum)		2 (3)	2	1
Number of Digital Inputs	Standard (Maximum)		8 (9)	3 (8)	2
Number of Program Patterns	Standard (Maximum)		30	2 (4)	—
Number of Programs Number of Segments per Pattern	Standard (Maximum)		300 99	20 (40) 10	—
Number of PV Events	(Per segment)		8	2	—
Number of Time Events	(Per segment)		16	4	—
Number of Alarms	Maximum		8	2	8
Number of Digital Outputs	Standard (Maximum)		8 (18)	3 (8)	3 (9)
Communication	RS-485 communication (Maximum)		✔ (2)	✔ (1)	✔ (1)
	Ethernet communication		✔	✔	—
	Open Network (CC-Link/PROFIBUS-DP /DeviceNet)		✔	✔	—
Various Function	Quick Setting Function		✔	✔	✔
	Split Computation Output Function		✔	—	✔
	Ratio and Square Root Extraction Function		✔	—	✔ *3
	Remote SP Function		✔	—	✔
	24 V DC Loop Power Supply Function		✔ *2	✔ *2	✔
	Heater Break Alarm Function		✔ (Standard type)	✔ (Standard type)	—
Ladder Sequence Function	(Number of max. steps)		✔ (500)	✔ (300)	—
Other Specifications	Power Supply	AC100 V to 240 V	✔	✔	✔
		AC/DC 24 V	✔	✔	✔
	Dust and waterproof Level of Front Panel		NEMA4*1 (IP56)	NEMA4*1 (IP56)	NEMA4*1 (IP56)
	Configuration Tool	Via Light-loader Communication	✔	✔	✔
		Via Maintenance Port Communication	✔	✔	✔
		Via RS-485/Ethernet communication	✔ / ✔	✔ / ✔	✔ / —

The table above includes specifications of the standard models only.

* 1: Hose down test only.
* 2: This function is available when the /L4 or /LC4 option is specified with the detailed code model.
* 3: Square root extraction available

Product line-up

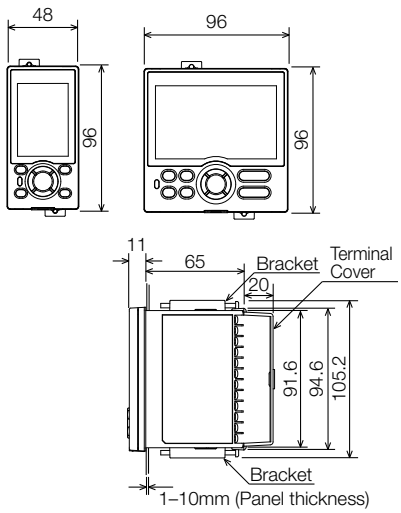
Digital Indicating Controller UT55A / UT52A (Standard model)

Main Features

- Up to 4 analog inputs available
- 3 alarm independent common terminals available as standard
- Ladder sequence programs can be built
- Simple operation
- Up to 18 DOs (combinations available)
- Multiple language operation manual (Japanese, English, German, French, Spanish, Chinese, and Korean) available.
  Please specify the desired language when ordering.

External Dimensions

UT52A UT55A Unit : mm



Model and Suffix Codes

Model	Suffix code	Optional suffix code	Description
UT55A			Digital Indicating Controller (provided with retransmission output or 15 V DC loop power supply, 3 DIs, and 3 DOs) (Power supply: 100-240 V AC)
Basic control	-0		Standard type
	-1		Position proportional type
	-2		Heating / cooling type
Functions (* 1)	0		None
	1		Remote (1 additional aux. analog) input, 6 additional DIs, 5 additional DOs, and RS-485 communication (Max.19.2 kbps, 2-wire / 4-wire) (* 2)
	2		Remote (1 additional aux. analog) input, 1 additional DI, and RS-485 communication (Max.19.2 kpbs, 2-wire / 4-wire) (* 2)
	3		5 additional DIs and 5 additional DOs
	4		Remote (1 additional aux. analog) input and 1 additional DI
	5		Remote (1 additional aux. analog) input, 6 additional DIs, and 5 additional DOs
	6		5 additional DIs and 15 additional DOs
	7		3 additional aux. analog inputs and 3 additional DIs
Open networks	0		None
	1		RS-485 communication (Max.38.4 kbps, 2-wire / 4-wire)
	2		Ethernet communication (with serial gateway function)
	3		CC-Link communication (with Modbus master function)
	4		PROFIBUS-DP communication (with Modbus master function)
	5		DeviceNet communication (with Modbus master function)
Display language (* 7)	-1		English
	-2		German
	-3		French
	-4		Spanish
Case color	0		White (Light gray)
	1		Black (Light charcoal gray)
	-00		Always "-00"
Options		/DR	Additional direct input (TC and 3-wire / 4-wire RTD) and DC current to Remote (1 additional aux. analog) input, 1 DI to be deleted (* 3)
		/LP	24 V DC loop power supply (* 4)
		/HA	Heater break alarm (* 5)
		/DC	Power supply 24 V AC / DC
		/CT	Coating (* 6)

* 1: When "1" or "6" is specified for the Functions code, only "0" can be specified for the Open networks code.
* 2: When the /LP option is specified, the RS-485 communication is 2-wire system.
* 3: When any of "1," "2," "4," "5," or "7" is specified for the Functions code, the /DR option can be specified.
* 4: /LP option can be specified in the combination of Functions code (any of "0", "2", "3" or "4") and Open networks code (any of "0" or "1"). Additionally, /LP option can be specified in the combination of Functions code "1" and Open networks code "0".
* 5: When "-0" is specified for the Basic control code, the / HA option can be specified.
* 6: When the /CT option is specified, the UT55A does not conform to the safety standards (UL and CSA) and CE marking.
* 7: English, German, French, and Spanish can be displayed as the guide display.

Model	Suffix code	Optional suffix code	Description
UT52A			Digital Indicating Controller (provided with retransmission output or 15 V DC loop power supply, 3 DIs, and 3 DOs) (Power supply: 100-240 V AC)
Basic control	-0		Standard type
	-1		Position proportional type
	-2		Heating / cooling type
Functions	0		None
	1		Remote (1 additional aux. analog) input, 1 additional DI, and RS-485 communication (Max. 38.4 kbps, 2-wire)
	2		Remote (1 additional aux. analog) input and 1 additional DI
	3		2 additional DIs and 2 additional DOs
Open networks	0		None
Display language (* 5)	-1		English
	-2		German
	-3		French
	-4		Spanish
Case color	0		White (Light gray)
	1		Black (Light charcoal gray)
	-00		Always "-00"
Options		/DR	Additional direct input (TC and 3-wire / 4-wire RTD) and DC current to Remote (1 additional aux. analog) input, 1 DI to be deleted. (* 1)
		/LP	24 V DC loop power supply (* 2)
		/HA	Heater break alarm (* 3)
		/DC	Power supply 24 V AC / DC
		/CT	Coating (* 4)

* 1: When "2" is specified for the Functions code, the /DR option can be specified.
* 2: When "-0" or "-1" is specified for the Basic control code, the /LP option can be specified.
  When "0" is specified for the Functions code, the /LP option can be specified.
* 3: When "-0" is specified for the Basic control code, the /HA option can be specified.
* 4: When the /CT option is specified, the UT52A does not conform to the safety standards (UL and CSA) and CE marking.
* 5: English, German, French, and Spanish can be displayed as the guide display.

Popular Universal I/O and Auto-Tuning Function Available

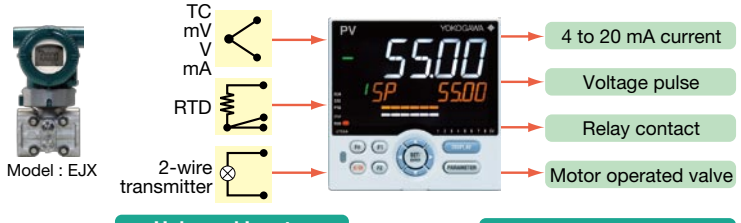
Universal Input

Select from TC, RTD, mV / DC voltage and DC current.
(Direct connection : No shunt resistor required)
The input type and range is user selectable via the front panel or by using the LL50A parameter setting software.

- **0.1% Indication Accuracy**
- **Connect up to two 2-wire transmitters simultaneously**

All instruments have a 15 V Loop Power Supply (15 V LPS) for a transmitter.
In addition, a 24 V LPS is also available simultaneously for some instruments as optional function.
Applicable models for 24 V LPS: UT55A, UT52A

Thermocouple Type	K, J, T, B, S, R, N, E, L, U, W, PL-2, PR20-40, W97Re3-W75Re25
RTD Type	Pt100, JPt100
DC Voltage Input	0.4 to 2V, 1 to 5V, 0 to 2V, 0 to 10V, -10 to 20mV, 0 to 100mV
DC Current Input	4 to 20mA, 0 to 20mA



Position proportional control for Control motor