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

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	✔	✔	—
	Algorithm — PID (Continuance, Time Proportion)	✔	✔	—
	Algorithm — Position proportional	✔	✔	—
	Algorithm — 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	✔	✔	✔
	Power Supply — 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	✔	✔	✔
	Configuration Tool — Via Maintenance Port Communication	✔	✔	✔
	Configuration Tool — 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.
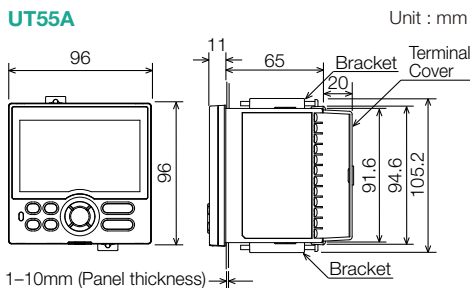* 3: Square root extraction available

Program Controller UP55A (Standard model)

Main Features

- Up to 30 program patterns
- 8 PV events, 16 time events, and 8 alarms can be monitored simultaneously
- Ladder sequence programs can be built
- Simple operation
- Up to 9 DIs and 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

UT55A

Unit : mm

1–10mm (Panel thickness)

Model and Suffix Codes

Model	Suffix code	Optional suffix code	Description
UP55A			Program Controller (provided with retransmission output or 15 V DC loop power supply, 8 DIs, and 8 DOs) (Power supply: 100-240 V AC) 30 program patterns / 300 program segments (Max. 99 segments per pattern)
Basic control	-0		Standard type
	-1		Position proportional type
	-2		Heating/cooling type
Functions (*1)	0		None
	1		Remote (1 additional aux. analog) input, 1 additional DI
	2		RS-485 communication (Max.19.2 kpbs, 2-wire/4-wire)
	3		10 additional DOs
	4		3 additional aux. analog inputs, 2 DIs and 5 DOs to be deleted
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 (*2)	-1		English
	-2		German
	-3		French
	-4		Spanish
Case color	0		White (Light gray)
	1		Black (Light charcoal gray)
Fixed code		-00	Always "-00"
Optional suffix codes		/DR	Additional direct input (TC and 3-wire/4-wire RTD) and current input to Remote (1 additional aux. analog) input, 1 DI to be deleted (*3)
		/HA	Heater break alarm (*4)
		/DC	Power supply 24 V AC/DC
		/CT	Coating (*5)

* 1: When "3" is specified for the Function code, only "0" can be specified for the Open network code.
* 2: English, German, French, and Spanish can be displayed as the guide display.
* 3: When any of "1" or "4" is specified for the Function code, the /DR option can be specified.
* 4: When "-0" is specified for the Basic control code, the /HA option can be specified.
* 5: When the /CT option is specified, the UP55A does not conform to the safety standards (UL and CSA) and CE marking.
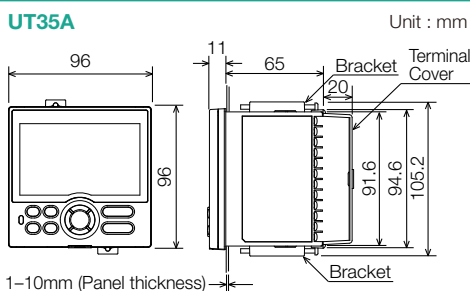
Program Controller UP35A (Standard model)

Main Features

- Up to 4 program patterns
- 2 PV events, 4 time events, and 2 alarms can be monitored simultaneously.
- Ladder sequence programs can be built
- Simple operation
- Up to 8 DIs and 8 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

UT35A

Unit : mm

1–10mm (Panel thickness)

Model and Suffix Codes

Model	Suffix code	Optional suffix code	Description
UP35A			Program Controller (provided with retransmission output or 15 V DC loop power supply, 3 DIs, and 3 DOs) (Power supply: 100-240 V AC) 2 program patterns/20 program segments (Max. 20 segments per pattern)
Basic control	-0		Standard type
	-1		Position proportional type
	-2		Heating/cooling type
Functions	0		None
	1		5 additional DIs, 5 additional DOs
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 (*1)	-1		English
	-2		German
	-3		French
	-4		Spanish
Case color	0		White (Light gray)
	1		Black (Light charcoal gray)
Fixed code		-00	Always "-00"
Optional suffix codes		/AP	2 additional patterns/20 additional segments
		/HA	Heater break alarm (*2)
		/DC	Power supply 24 V AC/DC
		/CT	Coating (*3)

* 1: English, German, French, and Spanish can be displayed as the guide display.
* 2: The /HA option can be specified when the Basic control code is "-0" or "-2."
* 3: When the /CT option is specified, the UP35A does not conform to the safety standards (UL and CSA) and CE marking.