

Schedule Reference:

Date:



Standard Model PURY-EP312TSNU-A

Seacoast (BS) Model PURY-EP312TSNU-A-BS

Minimum Operating Temperature

Heating (Outdoor): -25°F (-32°C) WB

Below -22°F (-30°C) WB, an auxiliary heating source is highly recommended.

System requires firmware Ver. 26.35 or later.

ACCESSORIES

Snow/Wind Guards - (See seperate submittal)

Panel Heater - (PAC-PH02FHYU-F) (x1) Panel

Heater - (PAC-PH03EHYU-E(1)) (x1)

Note: Mitsubishi Electric (MESCA) supports the use of only MESCA supplied and approved Snow Guard / Wind Deflectors / Windscreens and accessories for proper functioning of the unit(s). Use of non-MESCA supported Snow Guard / Wind Deflectors / Windscreens and accessories will affect warranty coverage.

Outdoor Model			PURY-EP312TSNU-A (-BS)	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 208-230 V ±10% 60 Hz	
Cooling capacity *1 (Nominal)		BTU/h	312,000	
		kW	91.4	
(208-230)	Power input	kW	27.98	
	Current input	A	86.2-78.0	
(Rated)		BTU/h	298,000	
		kW	87.3	
(208-230)	Power input	kW	30.80	30.68
	Current input	A	94.9-85.9	94.6-85.5
Temp. range of cooling		Indoor	W.B. 59~75°F (15~24°C)	
		Outdoor	D.B. 23~126°F (-5~52°C)	
Heating capacity *2 (Nominal)		BTU/h	350,000	
		kW	102.6	
(208-230)	Power input	kW	30.53	
	Current input	A	94.1-85.1	
(Rated)		BTU/h	334,000	
		kW	97.9	
(208-230)	Power input	kW	28.35	27.78
	Current input	A	87.4-79.0	85.6-77.4
Temp. range of heating		Indoor	D.B. 59~81°F (15~27°C)	
		Outdoor	W.B. -13~60°F (-25~15.5°C)	
Indoor unit connectable		Total capacity Model/Quantity		
		50~150% of outdoor unit capacity P04~P96/2~50		
Sound power level (measured in anechoic room) *3		dB <A>	87.0/88.5	
Refrigerant piping diameter		High pressure	in. (mm) 1-1/8 (28.58) Brazed	
		Low pressure	in. (mm) 1-5/8 (41.28) Brazed	

Set Model

Model			PURY-EP168TNU-A (-BS)	PURY-EP144TNU-A (-BS)
Minimum Circuit Ampacity (*)		A	70-70	60-60
Maximum Overcurrent Protection (*)		A	110-110	100-100
FAN	Type x Quantity	Propeller fan x 2		Propeller fan x 2
	Airflow rate	cfm	14,850	9,550
		m ³ /min	420	270
	Control, Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.92+0.92	0.46+0.46
	External static press.		0 in.WG (0 Pa)	0 in.WG (0 Pa)
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter
	Motor output	kW	12.2	9.8
	Case heater	kW	-	-
	Lubricant		MEL32	MEL32
External finish		Pre-coated galvanized steel sheet (+powder coating for -BS type) <MUNSELL 5Y 8/1> <MUNSELL 5Y 8/1>		Pre-coated galvanized steel sheet (+powder coating for -BS type) <MUNSELL 5Y 8/1> <MUNSELL 5Y 8/1>
External dimension H x W x D		in.	71-5/8 x 68-15/16 x 29-3/16	71-5/8 x 48-7/8 x 29-3/16
		mm	1,818 x 1,750 x 740	1,818 x 1,240 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Fan motor		-	-
Refrigerant	Type x original charge		R410A x 23 lbs + 12 oz (10.8 kg)	R410A x 23 lbs + 12 oz (10.8 kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	777 (352)	680 (308)
Heat exchanger		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube
HiC circuit (HiC: Heat Inter-Changer)		-		-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method		Auto-defrost mode (Reversed refrigerant cycle)		
Optional parts		Outdoor Twinning kit: CMY-R300NCBK Joint: CMY-Y102SS-G2, CMY-Y102L-S-G2, CMY-Y202S-G2, CMY-R160-J1, CMY-R201.202, 203.204, 205, 306S-G, CMY-R302, 303, 304, 305S-G1 Main BC controller: CMB-P108, 1012, 1016NU-JA1, CMB-P1016NU-KA1 Sub BC controller: CMB-P104, 108NU-KB1		

Notes:

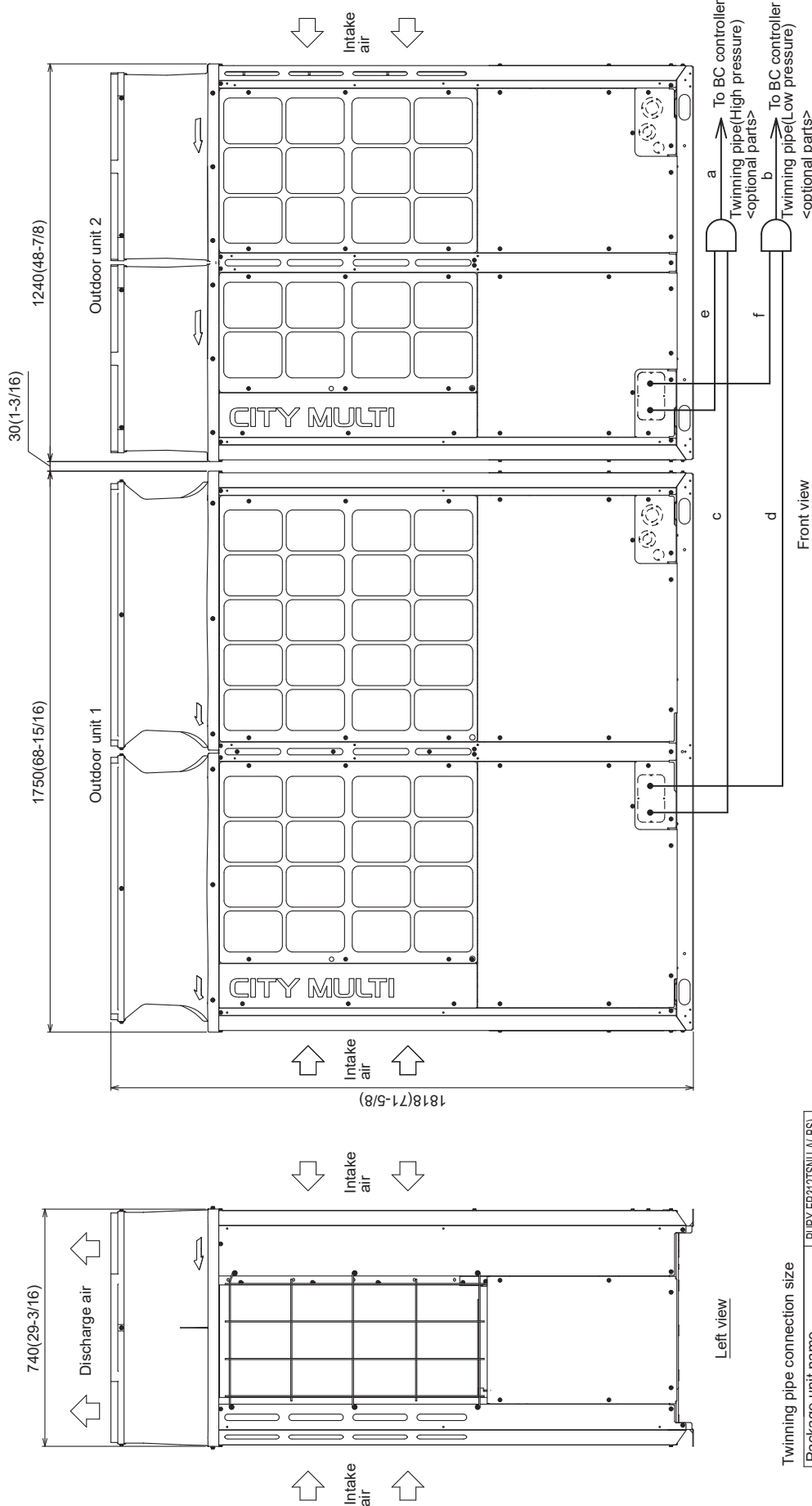
1. Nominal cooling conditions (Test conditions are based on AHRI 1230).
Indoor: 80°F DB / 67°F WB, (26.7°C DB / 19.4°C WB). Outdoor: 95°F DB, (35°C DB.)
 2. Nominal heating conditions (Test conditions are based on AHRI 1230).
Indoor: 70°F DB, (21.1°C DB). Outdoor: 47°F DB / 43°F WB, (8.3°C DB / 6.1°C WB.)
 3. When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.
 4. Cooling mode/Heating mode
 5. External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
- Due to continuing improvement, above specifications may be subject to change without notice.

Specifications are subject to change without notice.

* All electrical work shall comply with National (CEC) and local codes and regulations.

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Module: PURY-EP312TSNU-A(-BS) - DIMENSIONS



Twinning pipe connection size

Package unit name	PURY-EP312TSNU-A(-BS)
Outdoor unit 1	PURY-EP168TNU-A(-BS)
Outdoor unit 2	PURY-EP144TNU-A(-BS)
Outdoor Twinning Kit(optional parts)	CMY-R300NCBCK
BC controller	CMY-R300NCBCK
~Twinning pipe	High pressure a Low pressure b
	ø28.58(1-1/8) ø41.28(1-5/8)

Unit model	High pressure c or e	Low pressure d or f
EP144	ø22.2(7/8)	ø28.58(1-1/8)
EP168	ø22.2(7/8)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

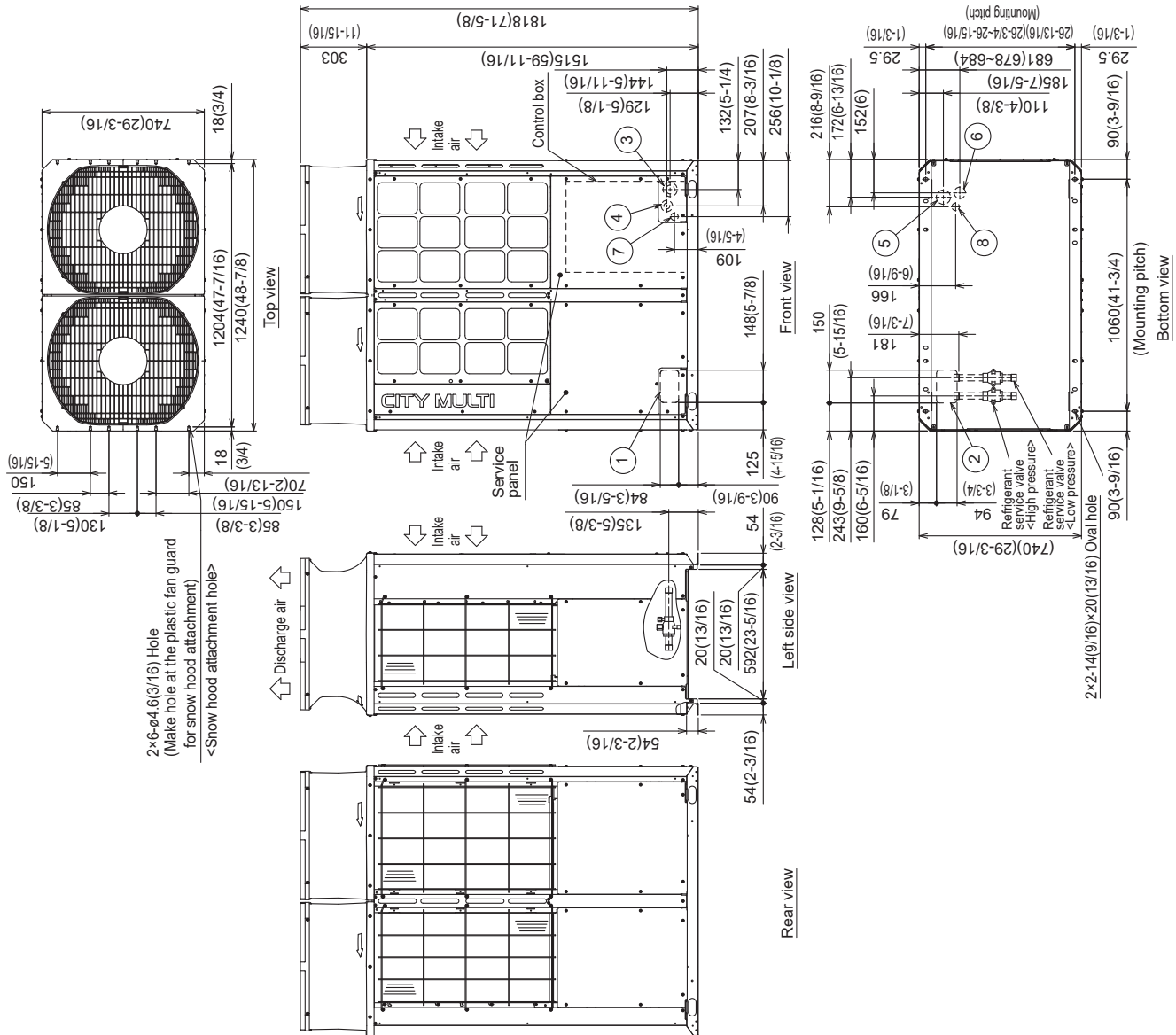
3. The pipe section before the Twinning pipe (section "a" and "b" in the figure) must have at least 500mm(19-11/16) of straight section (*including the straight pipe that is supplied with the Twinning pipe).

4. Only use the Twinning pipe by Mitsubishi (optional parts).

Unit: mm (in.)

Module: PURY-EP144TNU-A - DIMENSIONS

Note 1. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.
2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248°F).



Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe		Service valve	
EP96	High pressure	Low pressure	High pressure	Low pressure
EP120	ø19.0(3/4) Brazed *1	ø22.7(7/8) Brazed *1	ø28.5(1-1/8)	ø28.5(1-1/8)
EP144	ø19.0(3/4) Brazed *1	ø22.7(7/8) Brazed *1	ø28.5(1-1/8)	ø28.5(1-1/8)

*1 Connect the refrigerant pipe to the service valve according to the Installation Manual.

NO.	Usage	Specifications
①	Front through hole	148(5-7/8) x 84(3-5/16) Knockout hole
②	Bottom through hole	150(5-15/16) x 94(3-3/4) Knockout hole
③	Front through hole	ø27(2-1/2) or ø34.5(1-3/8) Knockout hole
④	Front through hole	ø43.7(1-3/4) or ø22.7(7/8) Knockout hole
⑤	Bottom through hole	ø65(2-9/16) Knockout hole
⑥	Bottom through hole	ø52(2-1/16) Knockout hole
⑦	Front through hole	ø34(1-3/8) Knockout hole
⑧	Bottom through hole	ø34(1-3/8) Knockout hole

Unit: mm (in.)

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Module: PURY-EP168TNU-A(-BS) - DIMENSIONS

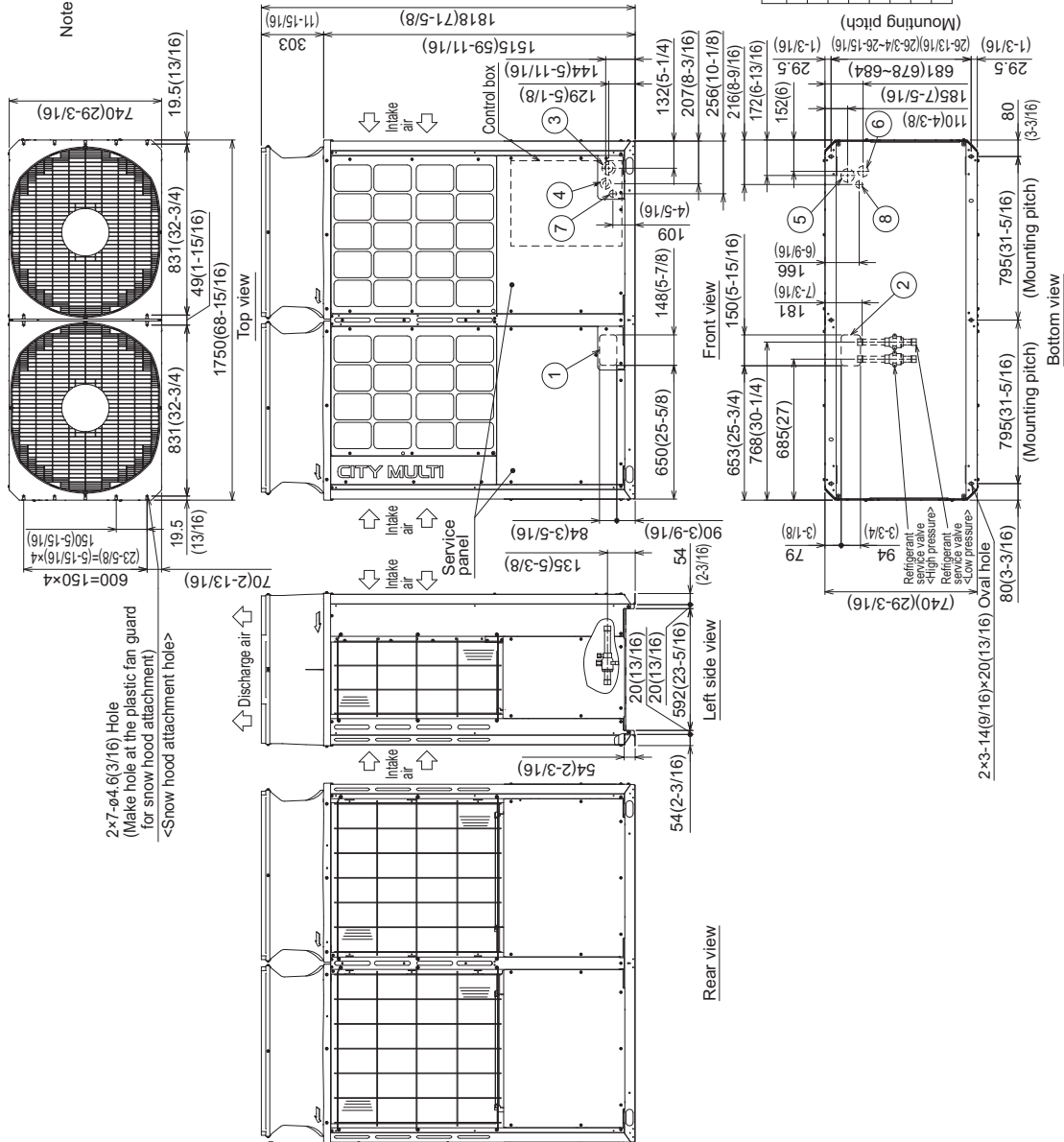
Unit: mm (in.)

Note 1. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.
2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248°F).

Connecting pipe specifications

Model	Refrigerant pipe		Service valve	
	High pressure	Low pressure	High pressure	Low pressure
EP168	ø22(7/8) Brazed*1	ø28(31/8) (1-1/8) Brazed	ø28(31/8) (1-1/8)	ø28(31/8) (1-1/8)

*1 Connect the refrigerant pipe to the service valve according to the Installation Manual.



NO.	Usage	Specifications
①	Front through hole	148(5-7/8) x 84(3-5/16) Knockout hole
②	Bottom through hole	150(5-15/16) x 94(3-3/4) Knockout hole
③	Front through hole	ø62(2-1/2) or ø34.5(1-3/8) Knockout hole
④	Front through hole	ø43(1-3/4) or ø22(7/8) Knockout hole
⑤	Bottom through hole	ø65(2-9/16) Knockout hole
⑥	Bottom through hole	ø52(2-1/8) Knockout hole
⑦	Front through hole	ø34(1-3/8) Knockout hole
⑧	Bottom through hole	ø34(1-3/8) Knockout hole

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