

CP Series (Natural Gas)

AIR COOLED DIESEL GENERATORS

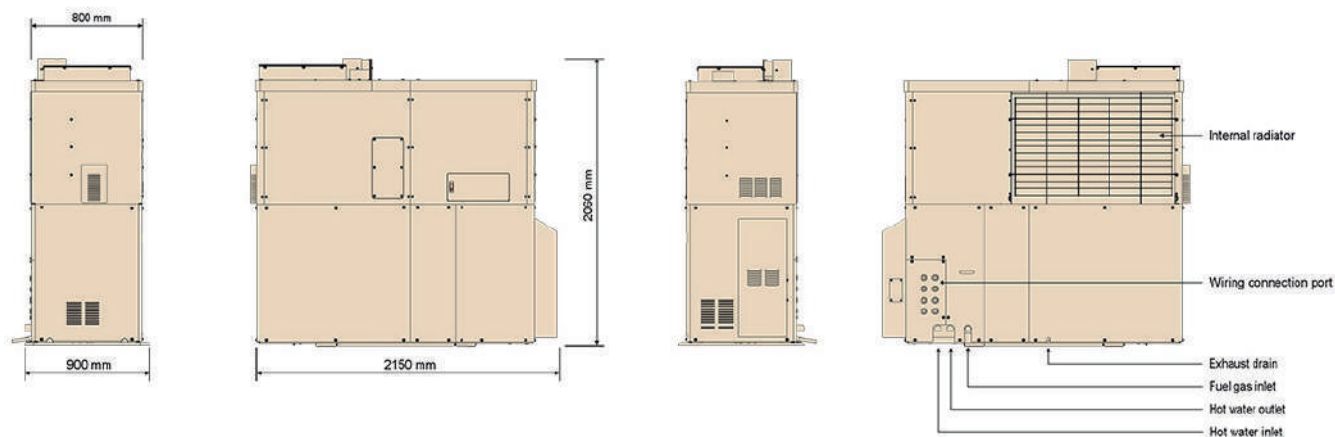
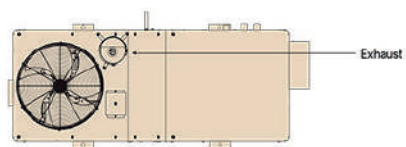


SPECIFICATIONS

Model		Standard CP Models	
		CP25WE-TNB	CP25WE-TPB
Output	Rated output ¹⁾ [kW]	25.0 ²⁾	
	Frequency [Hz]	50	
	Voltage [V]	400 AC	
	Current (supplied to load per phase) [A]	35.4 AC	
	Phases / wires	3 phase / 4 wire	
	Power factor [%]	97 or more	
Heat recovery	Recovered heat [kW]	38.4	39.2
	Hot water outlet temperature [C]	Maximum 85	
	Hot water flow rate [L/min]	110.0	113.0 ³⁾
Efficiency	Overall / generation / heat recovery [%]	85.0 / 33.3 / 51.5	86.0 / 33.5 / 52.5
Input power supply	Supply voltage [V]	400 AC (200 AC inside CP unit)	
	Starting current [A]	46.0 (average)	
Power consumption	Fan OFF / fan ON / heater ON ⁴⁾ [kW]	0.93 / 1.35 / 0.75	
Fuel gas	Gas consumption LHV ⁵⁾ (gas type) [kW]	74.6 (natural gas)	74.6 (propane gas)
	Supply pressure for fuel gas [kPA]	1.5 to 3.0	2.0 to 3.5
Unit dimensions ⁶⁾	Width / depth / height [mm]	2150 / 800 / 2060 including exhaust	
Weight	Including lubricant and coolant [kg]	1320	
Sound pressure	Maximum at rated load with Fan OFF / ON ⁷⁾ [dB(A)]	62.0 / 64.0	
Usage conditions	Ambient temperature [C]	-5 to +40	
	Relative humidity [%]	80 or less	
	Altitude [m]	2000 or less (down rating setting for over 300m)	
Gas engine	Engine type	Yanmar natural gas engine	Yanmar propane gas engine
	Specified engine lubricant	Yanmar genuine GHP oil	
	Specified engine coolant	Yanmar genuine GHP coolant	
	Catalyzer	Oxidization type	
Generator	Type	Compact and light weight permanent magnet generator	
Grid connection	Connection method	High efficiency inverter grid connection	
Output heat exchanger	Type	Stainless steel with brazed plate construction	
Servicing	Interval	10,000 hours	
Operation	Operation modes	Flexible cogeneration with internal radiator for power led operation	



DIMENSIONS



NOTES:

- 1) Heat recovery and efficiency values given are for rated output in standard atmospheric conditions.
 - 2) Power consumption is included.
 - 3) Maximum flow rate is 116 L/min
 - 4) Heater is for cold areas (ambient temperature 5C or less)
 - 5) Tolerance of +/- 5% is not included
 - 6) OD unit dimensions excluding connectors and other protrusions
 - 7) Maximum taken from measurements at 1.0m from unit at 1.2m above the ground in an anechoic room simulation
- For other regions model availability depends on local regulations.
Specifications maybe subject to change without notice.

CP Series (Bio Gas)

AIR COOLED DIESEL GENERATORS

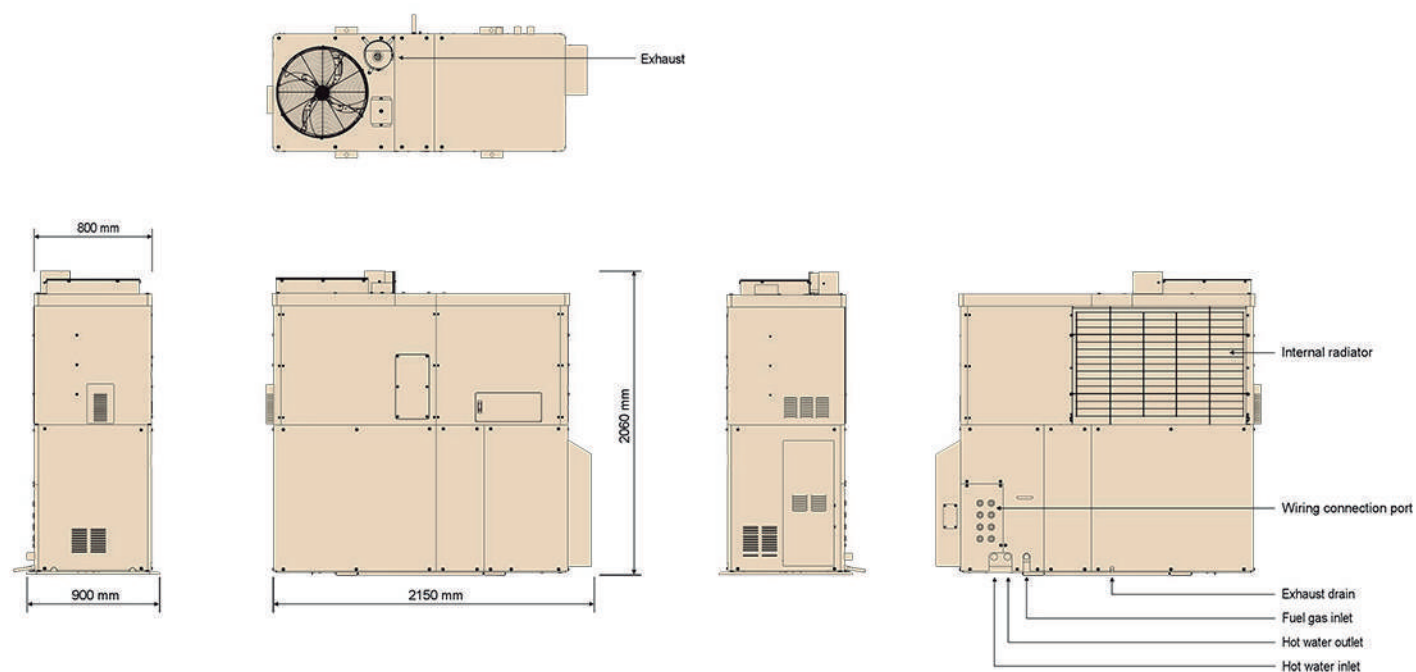


SPECIFICATIONS

Model		Bio gas CP Models	
		CP25WE-TF	CP25WE-TM
Output	Rated output ¹⁾ [kW]	25.0 ²⁾	
	Frequency [Hz]	50	
	Voltage [V]	400 AC	
	Current (supplied to load per phase) [A]	35.4 AC	
	Phases / wires	3 phase / 4 wire	
	Power factor [%]	97 or more	
Heat recovery	Recovered heat [kW]	40.6	38.7
	Hot water outlet temperature [C]	Maximum 85	
	Hot water flow rate [L/min]	116	110.0 ³⁾
Efficiency	Overall / generation / heat recovery [%]	84.0 / 32.0 / 52.0	84.0 / 33.0 / 51.0
Input power supply	Supply voltage [V]	400 AC (200 AC inside CP unit)	
	Starting current [A]	46.0 (average)	
Power consumption	Fan OFF / fan ON / heater ON ⁴⁾ [kW]	0.93 / 1.35 / 0.75	
Bio gas fuel	Density of methane [%]	60 to 70	80 to 90
	Gas consumption LHV ⁵⁾ [A]	78.1	75.8
	Supply pressure for fuel gas [kPA]	1.5 to 2.5	
Unit dimensions ⁶⁾	Width / depth / height [mm]	2150 / 800 / 2060 including exhaust	
Weight	Including lubricant and coolant [kg]	1320	
Sound pressure	Maximum at rated load with Fan OFF / ON ⁷⁾ [dB(A)]	62.0 / 64.0	
Usage conditions	Ambient temperature [C]	-5 to +40	
	Relative humidity [%]	80 or less	
	Altitude [m]	2000 or less (down rating setting for over 300m)	
Gas engine	Engine type	Yanmar bio gas engine	Yanmar bio gas engine
	Specified engine lubricant	Yanmar genuine GHP oil	
	Specified engine coolant	Yanmar genuine GHP coolant	
Generator	Type	Compact and light weight permanent magnet generator	
Grid connection	Connection method	High efficiency inverter grid connection	
Output heat exchanger	Type	Stainless steel with brazed plate construction	
Servicing	Interval	6,000 hours	
Operation	Operation modes	Flexible cogeneration with internal radiator for power led operation	



DIMENSIONS



NOTES:

- 1) Heat recovery and efficiency values given are for rated output in standard atmospheric conditions.
 - 2) Power consumption is included.
 - 3) Maximum flow rate is 116 L/min
 - 4) Heater is for cold areas (ambient temperature 5C or less)
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 - 6) OD unit dimensions excluding connectors and other protrusions
 - 7) Maximum taken from measurements at 1.0m from unit at 1.2m above the ground in an anechoic room simulation
- For other regions model availability depends on local regulations.
Specifications maybe subject to change without notice.



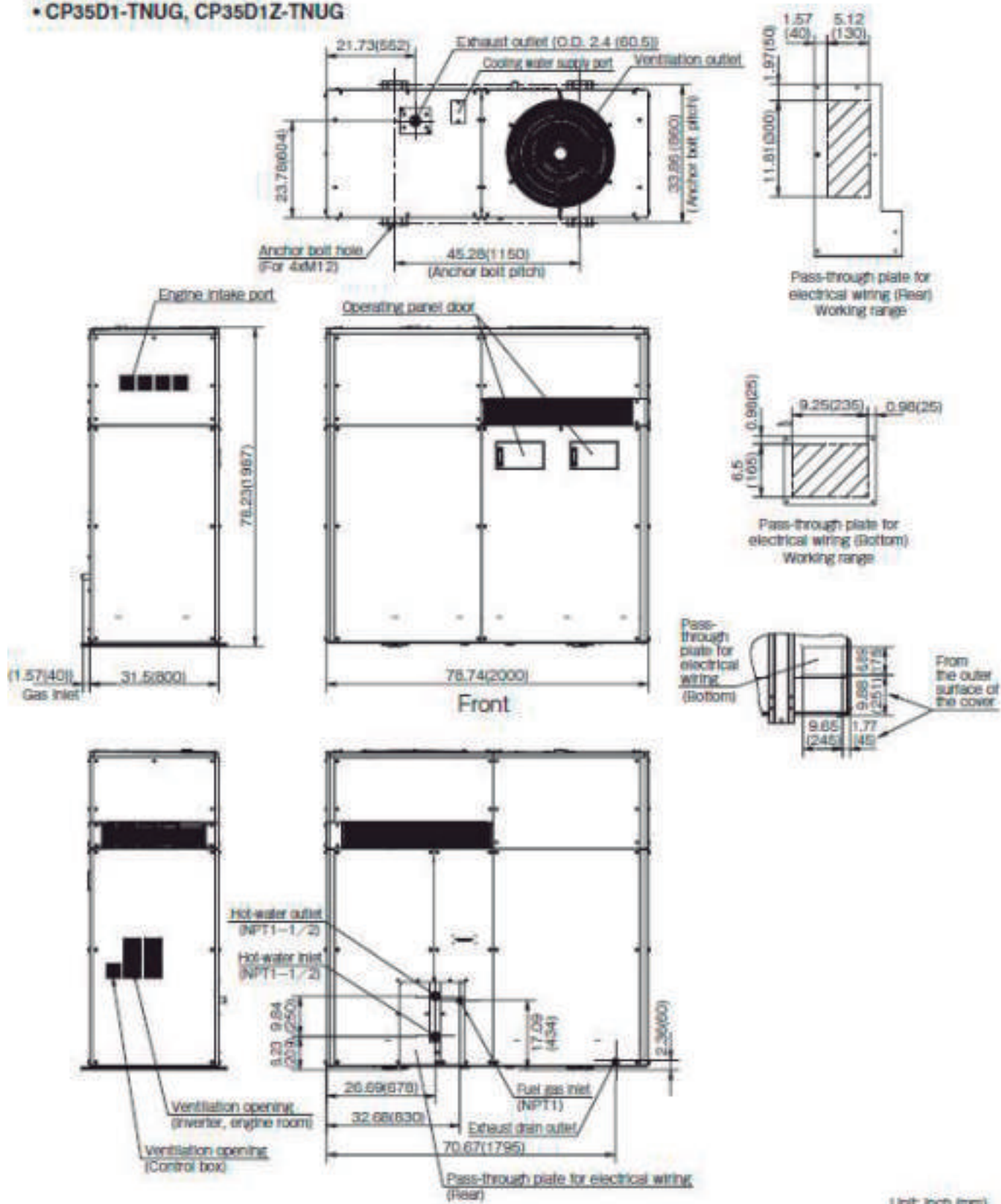
SPECIFICATIONS

YANMAR 35 kW CHP System Specifications

Model				CP35D1-TNUG	CP35D1Z-TNUG	CP35D1-TNUW	CP35D1Z-TNUW	
Configuration				-	Standard	Standard with Blackout Start	Radiator-Free	Radiator-Free with Blackout Start
Power Output	Rated output		kW	35	35	35	35	
	Voltage, Frequency		V, Hz	208, 60	208, 60	208, 60	208, 60	
	Phase and Wire		-	3 phase, 3 wire	3 phase, 3 wire ¹⁾	3 phase, 3 wire	3 phase, 3 wire ¹⁾	
	Modulation		0.5 to 35 kW with optional CT/Transducer kit ¹⁾					
Fuel	Gas Type		-	Natural gas	Natural gas	Natural gas	Natural gas	
	Pressure	Standard	in WC (kPa)	9.0 (2.25)	9.0 (2.25)	9.0 (2.25)	9.0 (2.25)	
		Working Range	in WC (kPa)	8.0-10.0 (2.0-2.5)	8.0-10.0 (2.0-2.5)	8.0-10.0 (2.0-2.5)	8.0-10.0 (2.0-2.5)	
	Consumption (LHV)		BTU (kW)	367,487 (107.7)	367,487 (107.7)	367,487 (107.7)	367,487 (107.7)	
			THERMS/HR	3.67	3.67	3.67	3.67	
	Consumption (HHV) ²⁾		BTU (kW)	407,114 (119.3)	407,114 (119.3)	407,114 (119.3)	407,114 (119.3)	
			THERMS/HR	4.07	4.07	4.07	4.07	
Consumption (Input kW/kWe)		kW	3.08	3.08	3.08	3.08		
Heat Output (Heat Recovery)	Rated recovered heat		BTU/HR (kW)	204,040 (59.8)	204,040 (59.8)	204,040 (59.8)	204,040 (59.8)	
	Rated Temp.	INLET	°F (°C)	167 (75)	167 (75)	167 (75)	167 (75)	
		OUTLET	°F (°C)	176 (80) MAX 190.4 (88)	176 (80) MAX 190.4 (88)	176 (80) MAX 190.4 (88)	176 (80) MAX 190.4 (88)	
	Rated Hot water Flow		GPM (L/min)	46.5 (176)	46.5 (176)	46.5 (176)	46.5 (176)	
Input Power Supply	Voltage, Frequency		V, Hz	208, 60	208, 60	208, 60	208, 60	
	Starting Current		A	46	46	46	46	
	Rated power consumption	Radiator fan stop	kW	0.72	0.75	NA	NA	
		Radiator fan run	kW	0.97	1.00	NA	NA	
Gross Efficiency	Overall efficiency (LHV)		%	88.0	88.0	88.0	88.0	
	Generating efficiency (LHV)		%	32.5	32.5	32.5	32.5	
	Exhaust heat recovery rate (LHV)		%	55.5	55.5	55.5	55.5	
Operation Noise	Radiator fan stop		dB(A)	62	62	NA	NA	
	Radiator fan run			64	64	NA	NA	
Dimensions	Width		in (mm)	78.7 (2000)	78.7 (2000)	78.7 (2000)	78.7 (2000)	
	Depth		in (mm)	31.5 (800)	31.5 (800)	31.5 (800)	31.5 (800)	
	Height		in (mm)	78.2 (1987)	78.2 (1987)	78.2 (1987)	78.2 (1987)	
	Weight		lbs (kg)	3,064 (1390)	3,284 (1430)	3,064 (1390)	3,284 (1430)	
Maintenance Interval			hr	7500	7500	7500	7500	
Standard Warranty			-	2 Years; 15,000 Hours*	2 Years; 15,000 Hours*	2 Years; 15,000 Hours*	2 Years; 15,000 Hours*	
YES Product Protection			-	10 Years; 30,000 Hours*	10 Years; 30,000 Hours*	10 Years; 30,000 Hours*	10 Years; 30,000 Hours*	
			-	10 years; 60,000 Hours*	10 years; 60,000 Hours*	10 years; 60,000 Hours*	10 years; 60,000 Hours*	
Emissions & Certifications				EPA Certified UL2200 Certified CSAC22.2 No 14 Certified CSAC22.2 No 100 Certified UL1741/IEEE1547 Certified				

[Standard specification]

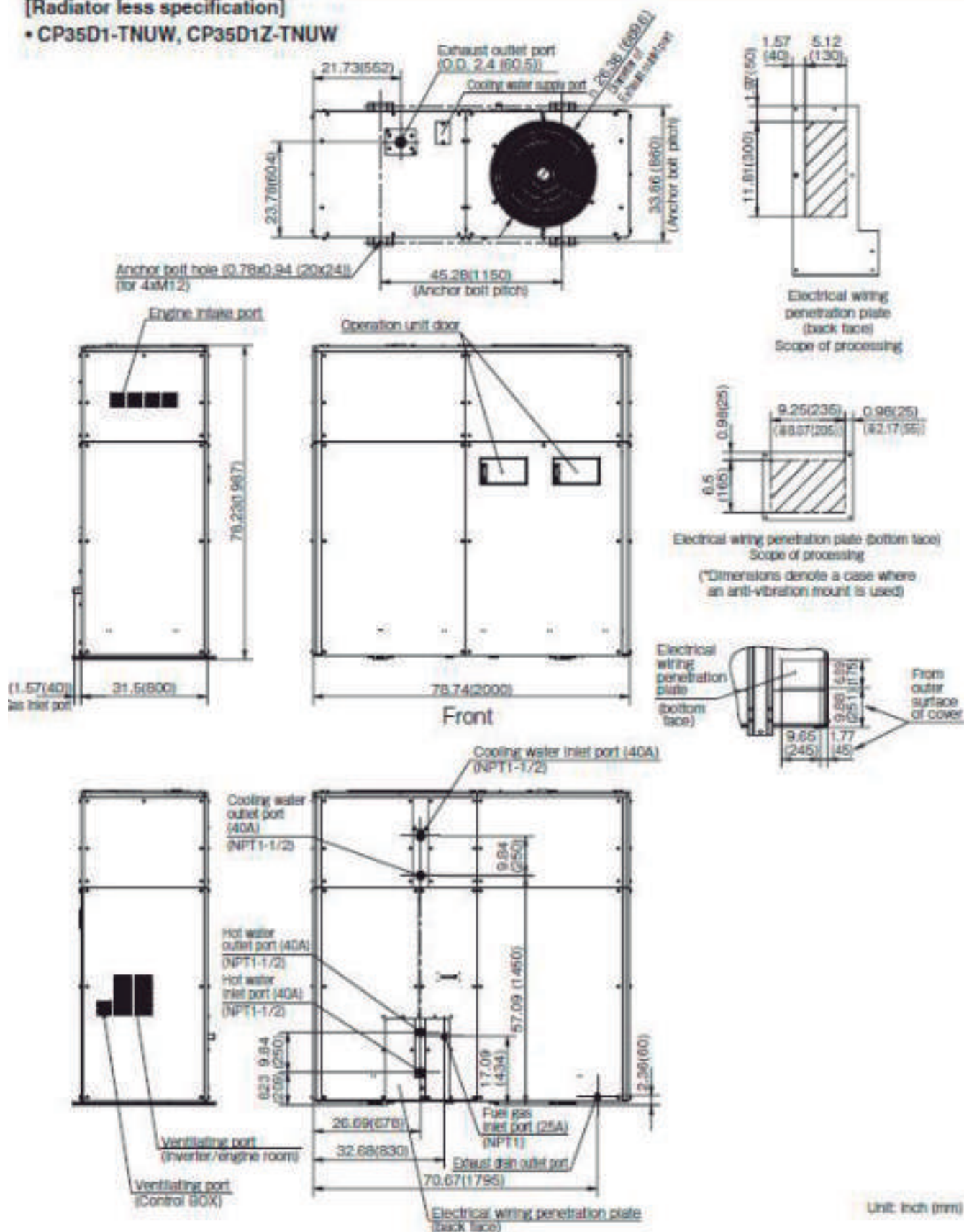
• CP35D1-TNUG, CP35D1Z-TNUG



NOTE: Due to YANMAR's ongoing commitment to quality, specifications, ratings and dimensions subject to change without notice. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be in accordance with current specifications, ratings and dimensions and be performed by a qualified installer and servicing agency.

[Radiator less specification]

• CP35D1-TNUW, CP35D1Z-TNUW



Unit: Inch (mm)

NOTE: Due to YANMAR's ongoing commitment to quality, specifications, ratings and dimensions subject to change without notice. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be in accordance with current specifications, ratings and dimensions and be performed by a qualified installer and servicing agency



SPECIFICATIONS

MODEL				CP35D2-TNUG	CP35D2Z-TNUG
POWER OUTPUT	Rated Output		kW	35.0 ^{*2,*3}	35.0 ^{*2,*3}
			kVA	-	35.0 ^{*2,*3}
	Voltage, Frequency		V , Hz	AC 208 , 60	
	Phase & Wire		-	3 phase , 3 wire	
	Modulation		%	0.95 to 1.00	
FUEL	Gas Type		-	Natural	
	Pressure	Standard	in.WC (kPA)	8.03 (2.0)	
		Working Range	in.WC (kPA)	8.0 - 10.0 (2.0 - 2.5)	
	Consumption (LHV)		kBTU/hr (kW)	367.6 (107.7)	
HEAT OUTPUT (HEAT RECOVERY)	Rated Recovered Heat		kBTU/hr (kW)	204.1 (59.8)	
	Rated Temp	Inlet	F (C)	167.0 (75.0)	
		Outlet	F (C)	176.0 (80.0) Max: 190.4 (88.0)	
	Rated Hot Water Flow		gal / min (L / min)	46.5 (176.0) when outlet temp 176F (80C)	
INPUT POWER SUPPLY	Input Voltage		V	AC208	
	Starting Current		A	AC46 (Average Current)	
	Rated Power Consumption	Radiator Fan Stop	kW	0.50	
		Radiator Fan Run	kW	1.00	
GROSS EFFICIENCY ^{*1}	Overall Efficiency (LHV)		%	88.0	
	Generating Efficiency (LHV)		%	32.5	
	Exhaust Heat Recovery Rate (LHV)		%	55.5	
OPERATION NOISE	Radiator Fan Stop		dB(A)	63	
	Radiator Fan Run		dB(A)	65	
DIMENSIONS	Width		in (mm)	78.74 (2000)	
	Depth		in (mm)	31.50 (800) Including the width of the leg 35.43 (900)	
	Height		in (mm)	81.30 (2065)	
	Weight - Including Cooling Water & Lubricant		lb (kg)	3064 (1390)	3086 (1400)
MAINTENANCE INTERVAL			Hours	7500	

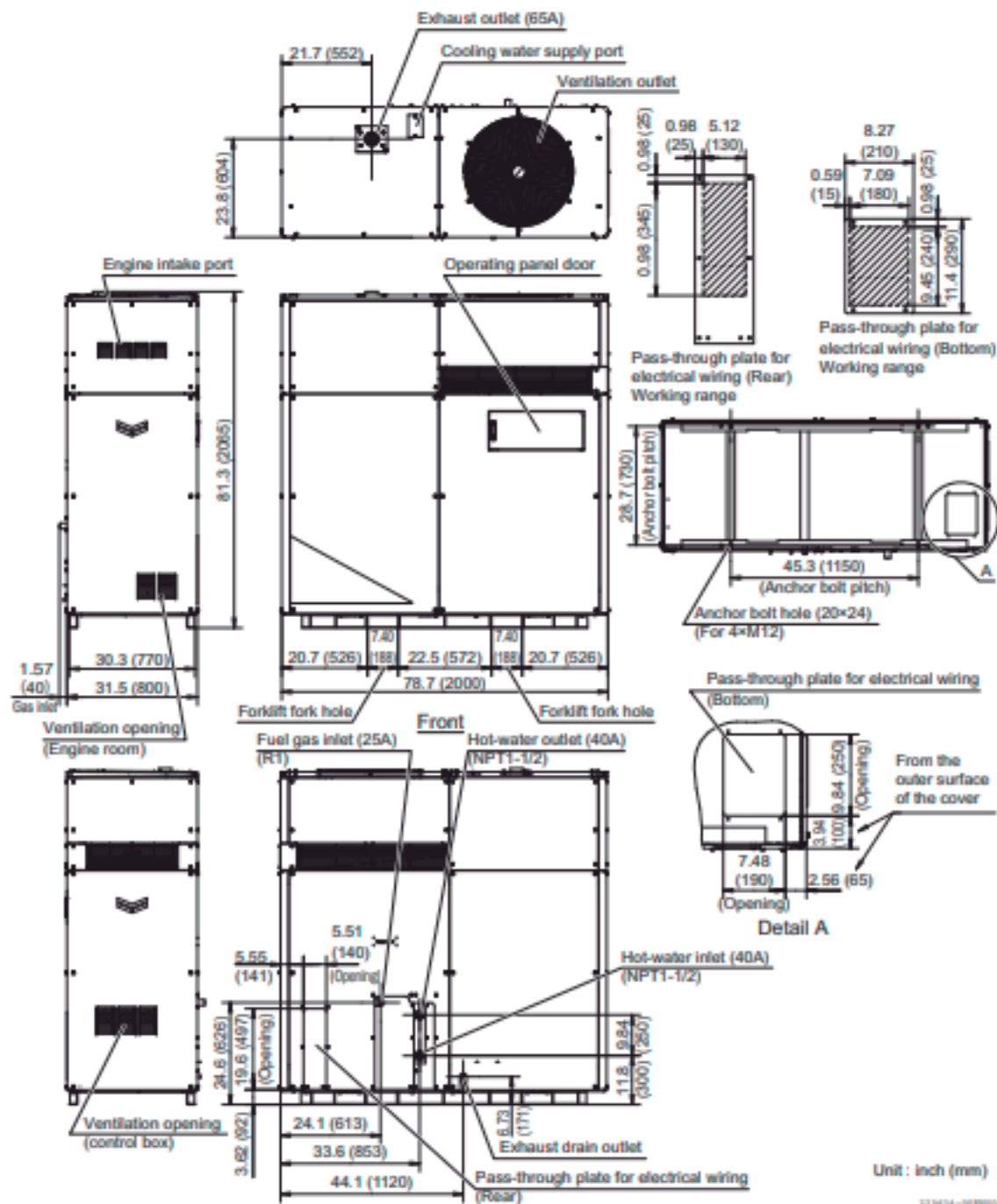
*1: Test Condition - Temperature 15degC, Humidity 30%, Altitude 0m, with fuel gas maximum heat value in EPA regulation.

*2: Includes electricity consumption.

*3: The output values depending on the installation conditions.

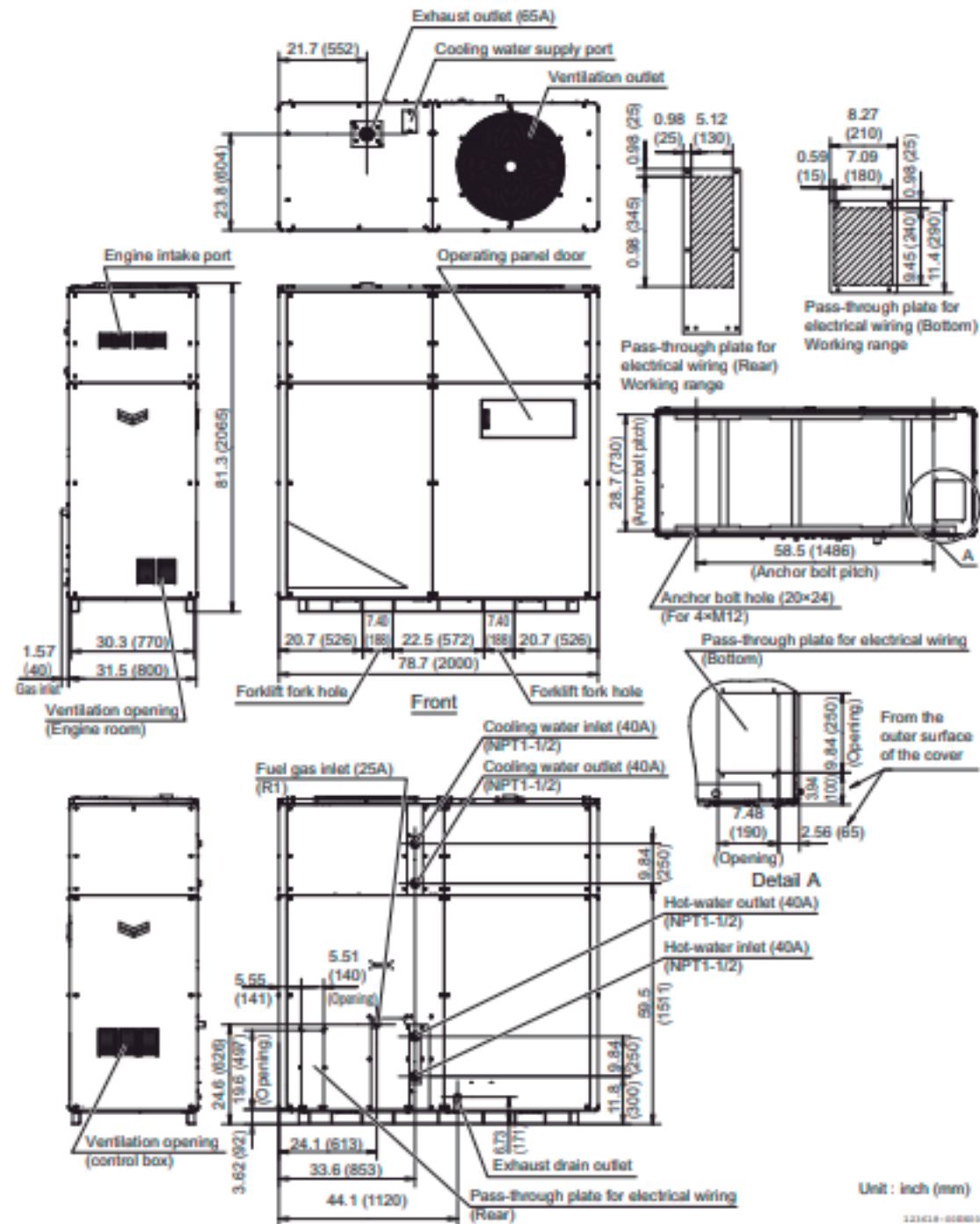
[Standard specification]

• CP35D2-TNUG, CP35D2Z-TNUG



[Radiator less specification]

- CP35D2-TNUW, CP35D2Z-TNUW



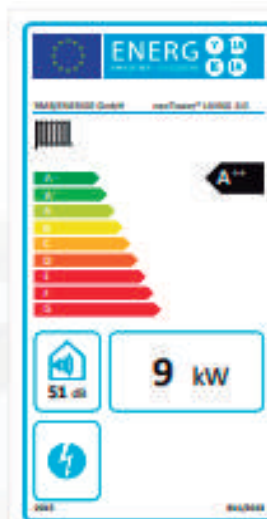
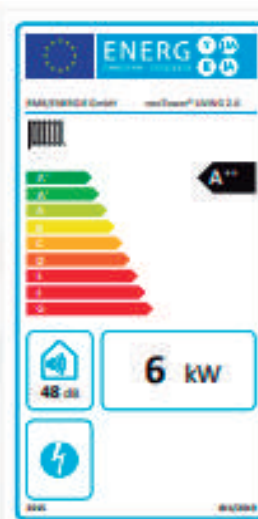
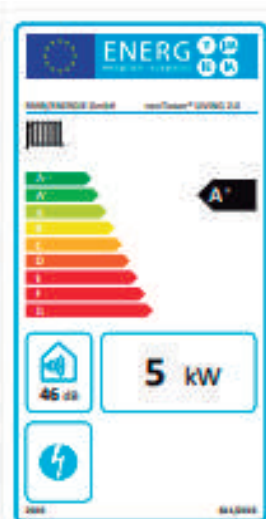


SPECIFICATIONS

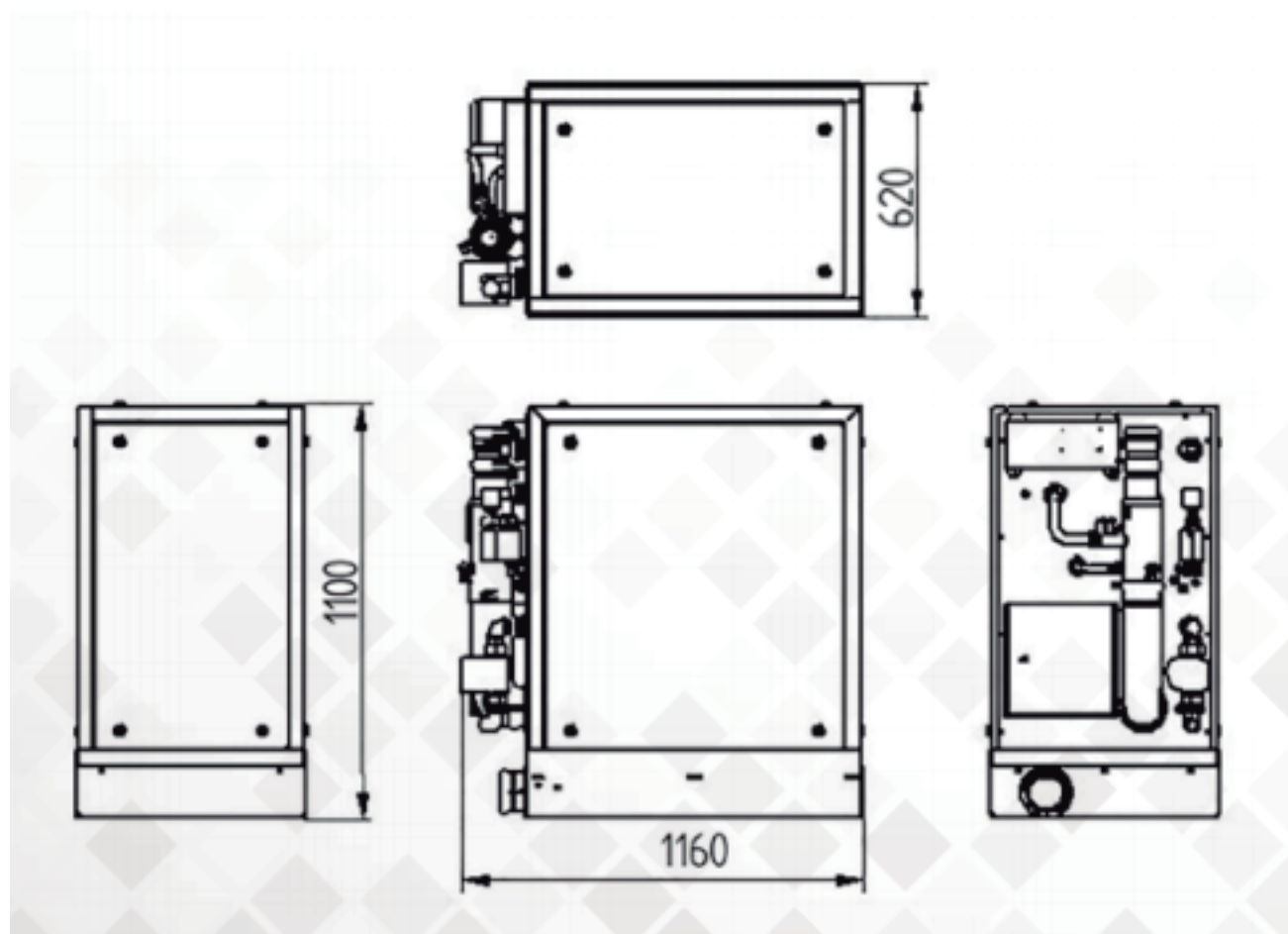
LIVING
Rated electrical output (1) [kW _{el}]
Rated thermal output (2) [kW _{th}]
Electrical output modulation [kW _{el}]
Thermal output modulation [kW _{th}]
f _{Pe} primary energy factor (3)
ErP energy efficiency label (4)
Maintenance interval [op. hrs]
Electrical efficiency ratio η_{el} [%]
Thermal efficiency ratio η_{th} [%]
Total efficiency ratio η_{tot} [%]
Permissible supply temperature max. [°C]
Permissible return temperature max. [°C]
Nominal voltage [V]
Frequency [Hz]
Cos ϕ acc. to VDE-AR-N 4105 quadrant II, III
start-up current I_k [A] approx.
Motor manufacturer
Number of cylinders
Displacement [l]
Method of operation: air ratio λ
Engine oil [l]
Alternator type
Speed [rpm]
Flue gas temperature (5) [°C]
Dimensions of module L x W x H [mm]
Weight, approx. [kg]

neoTower® 2.0	neoTower® 2.6	neoTower® 4.0
2	2,6	4,0
5,2	5,9	8,8
1,1 - 2,0	1,3 - 2,6	2,0 - 4,0
3,8 - 5,2	4,1 - 5,9	5,9 - 8,7
0,445	0,305	0,302
A+	A++	A++
15.000	15.000	10.000
EFFICIENCIES		
27,8	31,3	31,7
72,3	71,7	69,3
100,1	103,0	101,0
HEAT EXTRACTION		
75	75	75
25-65	25-65	25-65
ELECTRIC POWER GENERATION		
400	400	400
50	50	50
0,95	0,95	0,95
26	26	39
MOTOR		
YANMAR	YANMAR	YANMAR
3	3	3
0,7	0,7	0,7
1,6	1,6	1,6
17	17	17
GENERATOR		
asynchronous	asynchronous	asynchronous
1.020	1.020	1.540
FUMES		
50	50	50
DIMENSIONS & WEIGHTS		
1.160x620x1.100	1.160x620x1.100	1.160x620x1.100
410	410	410

- 1) Performance data in accordance with ISO 3046/1-2002, tolerance 5%.
- 2) Thermal performance data tolerance 8%
- 3) fpe current = 2.8 displacement ratio according to DIN V 18599,
- DIN V 4701-10, EnEV 2014 valid as of 01/01/2016
- 4) In accordance with EU Regulation 811/2013; 813/2013
- 5) At a return flow temperature of $\leq 30^{\circ}\text{C}$



DIMENSIONS



PREMIUM S

MICRO-COGENERATION SYSTEMS

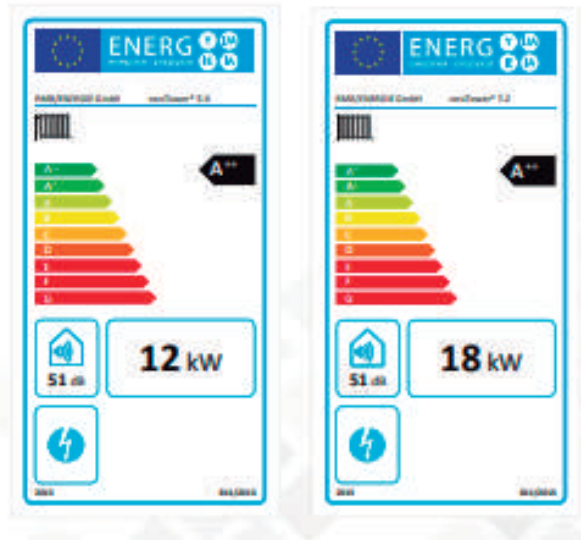


SPECIFICATIONS

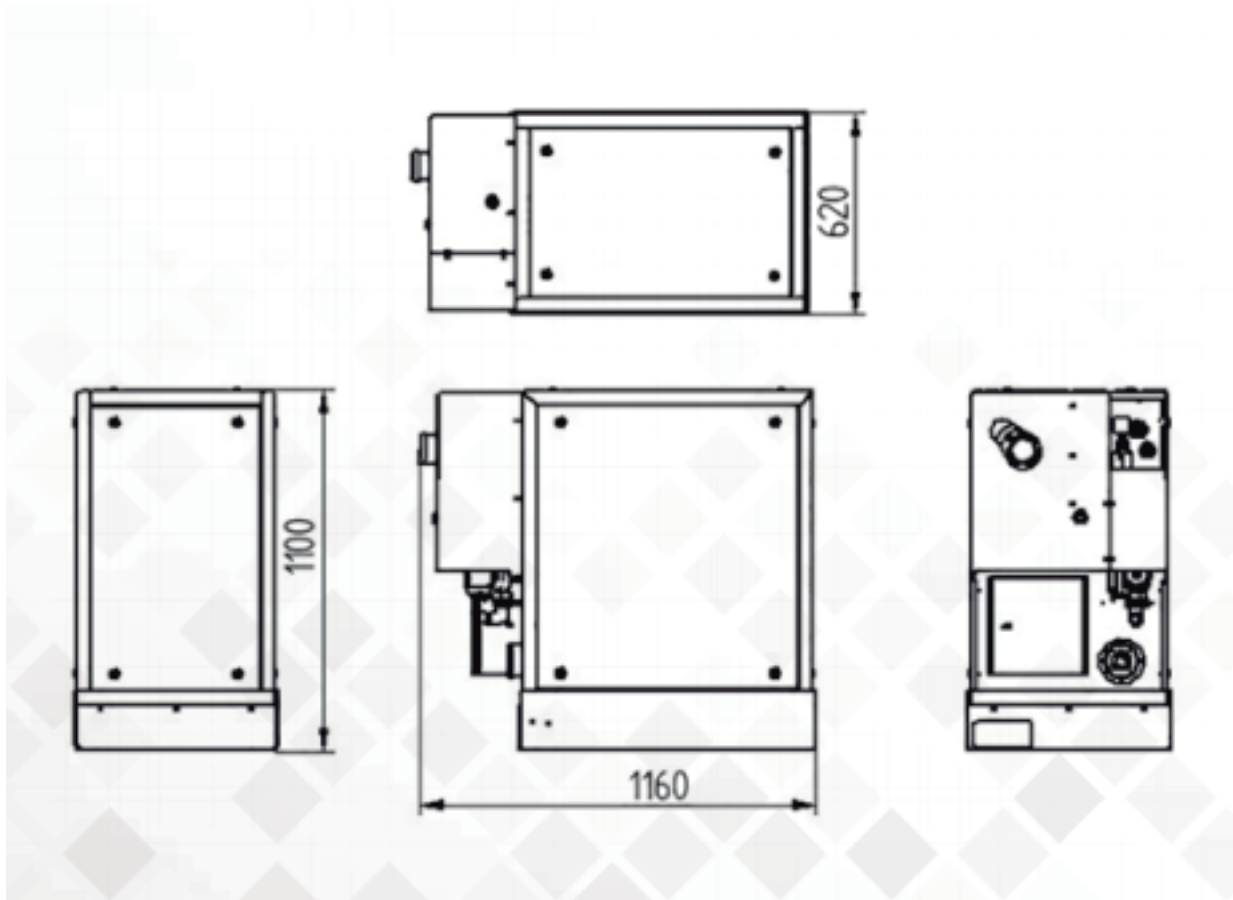
PREMIUM S
Rated electrical output (1) [kW _{el}]
Rated thermal output (2) [kW _{th}]
Electrical output modulation [kW _{el}]
Thermal output modulation [kW _{th}]
fP _e primary energy factor (3)
ErP energy efficiency label (4)
Maintenance interval [op. hrs]
Electrical efficiency ratio η_{el} [%]
Thermal efficiency ratio η_{th} [%]
Total efficiency ratio η_{tot} [%]
Permissible supply temperature max. [°C]
Permissible return temperature max. [°C]
Nominal voltage [V]
Frequency [Hz]
Cos ϕ acc. to VDE-AR-N 4105 quadrant II, III
start-up current I _k [A] approx.
Motor manufacturer
Number of cylinders
Displacement [l]
Method of operation: air ratio λ
Engine oil [l]
Alternator type
Speed [rpm]
Flue gas temperature (5) [°C]
Dimensions of module L x W x H [mm]
Weight, approx. [kg]

neoTower® 5.0	neoTower® 7.2
5	7,2
11,9	18,1
2,9 - 5,0	3,9 - 7,2
9,2 - 11,9	12,7 - 18,1
0,283	0,290
A++	A++
10.000	10.000
EFFICIENCIES	
31,6	31,2
75,7	78,3
107,3	109,5
HEAT EXTRACTION	
80	80
25-65	25-65
ELECTRIC POWER GENERATION	
400	400
50	50
0,95	0,95
45	45
MOTOR	
Toyota	Toyota
3	3
1	1
1,6	1,0
26	26
GENERATOR	
asynchronous	asynchronous
1.550	1.550
FUMES	
72	87
DIMENSIONS & WEIGHTS	
1.160x620x1.100	1.160x620x1.100
490	490

- 1) Performance data in accordance with ISO 3046/1-2002, tolerance 5%
- 2) Thermal performance data tolerance 8%
- 3) fpe current = 2.8 displacement ratio according to DIN V 18599,
DIN V 4701-10, EnEV 2014 valid as of 01/01/2016
- 4) In accordance with EU Regulation 811/2013; 813/2013
- 5) At a return flow temperature of $\leq 30^{\circ}\text{C}$



DIMENSIONS



PREMIUM S+

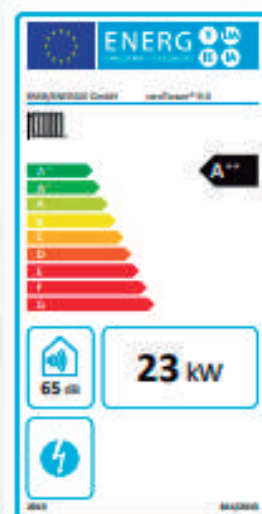
MICRO-COGENERATION SYSTEMS



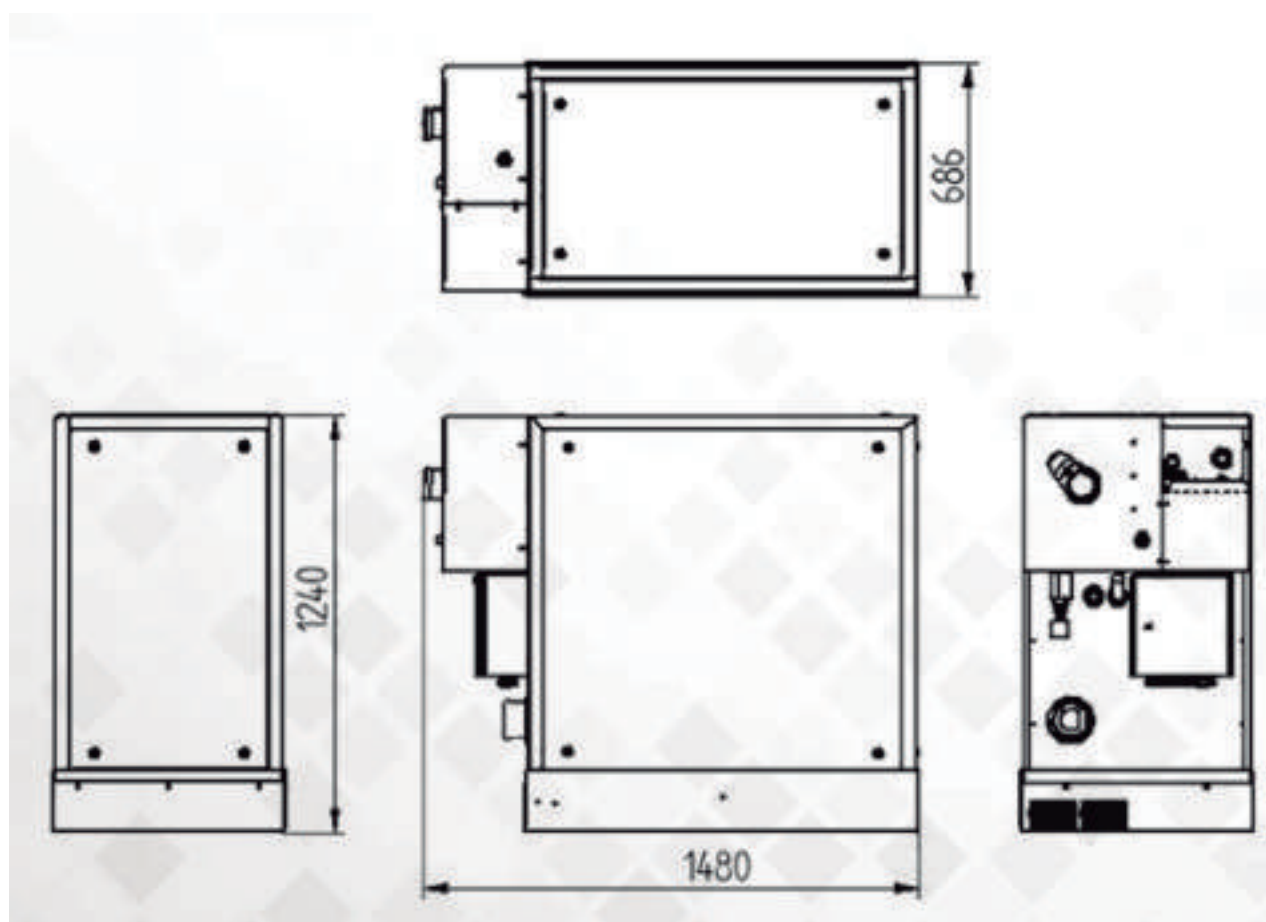
SPECIFICATIONS

PREMIUM S+	neoTower® 9.0
Rated electrical output (1) [kWel]	9
Rated thermal output (2) [kWth]	22,9
Electrical output modulation [kWel]	4,5 - 9,0
Thermal output modulation [kWth]	12,8 - 22,9
fPe primary energy factor (3)	0,318
ErP energy efficiency label (4)	A++
Maintenance interval [op. hrs]	8000
	EFFICIENCIES
Electrical efficiency ratio el [%]	30,5
Thermal efficiency ratio th [%]	77,5
Total efficiency ratio tot [%]	108
	HEAT EXTRACTION
Permissible supply temperature max. [°C]	85
Permissible return temperature max. [°C]	70
	ELECTRIC POWER GENERATION
Nominal voltage [V]	400
Frequency [Hz]	50
Cos f acc. to VDE-AR-N 4105 quadrant II, III	0,95
start-up current Ik [A] approx.	45
	MOTOR
Motor manufacturer	YANMAR
Number of cylinders	3
Displacement [l]	1,7
Method of operation: air ratio λ	1
Engine oil [l]	20
	GENERATOR
Alternator type	asynchronous
Speed [rpm]	1525
	FUMES
Flue gas temperature (5) [°C]	87
	DIMENSIONS & WEIGHTS
Dimensions of module L x W x H [mm]	1480 x 686 x 1240
Weight, approx. [kg]	652

- 1) Performance data in accordance with ISO 3046/1-2002, tolerance 5%
- 2) Thermal performance data tolerance 8%
- 3) fpe current = 2.8 displacement ratio according to DIN V 18599,
DIN V 4701-10, EnEV 2014 valid as of 01/01/2016
- 4) In accordance with EU Regulation 811/2013; 813/2013
- 5) At a return flow temperature of $\leq 30^{\circ}\text{C}$



DIMENSIONS



PREMIUM M

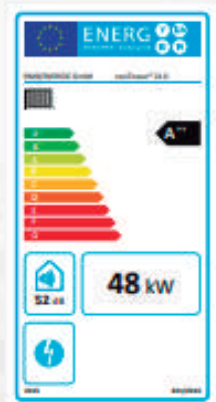
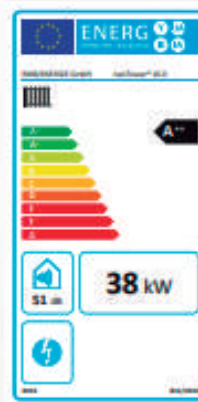
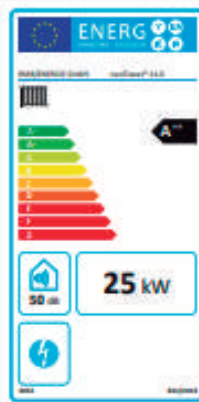
MICRO-COGENERATION SYSTEMS



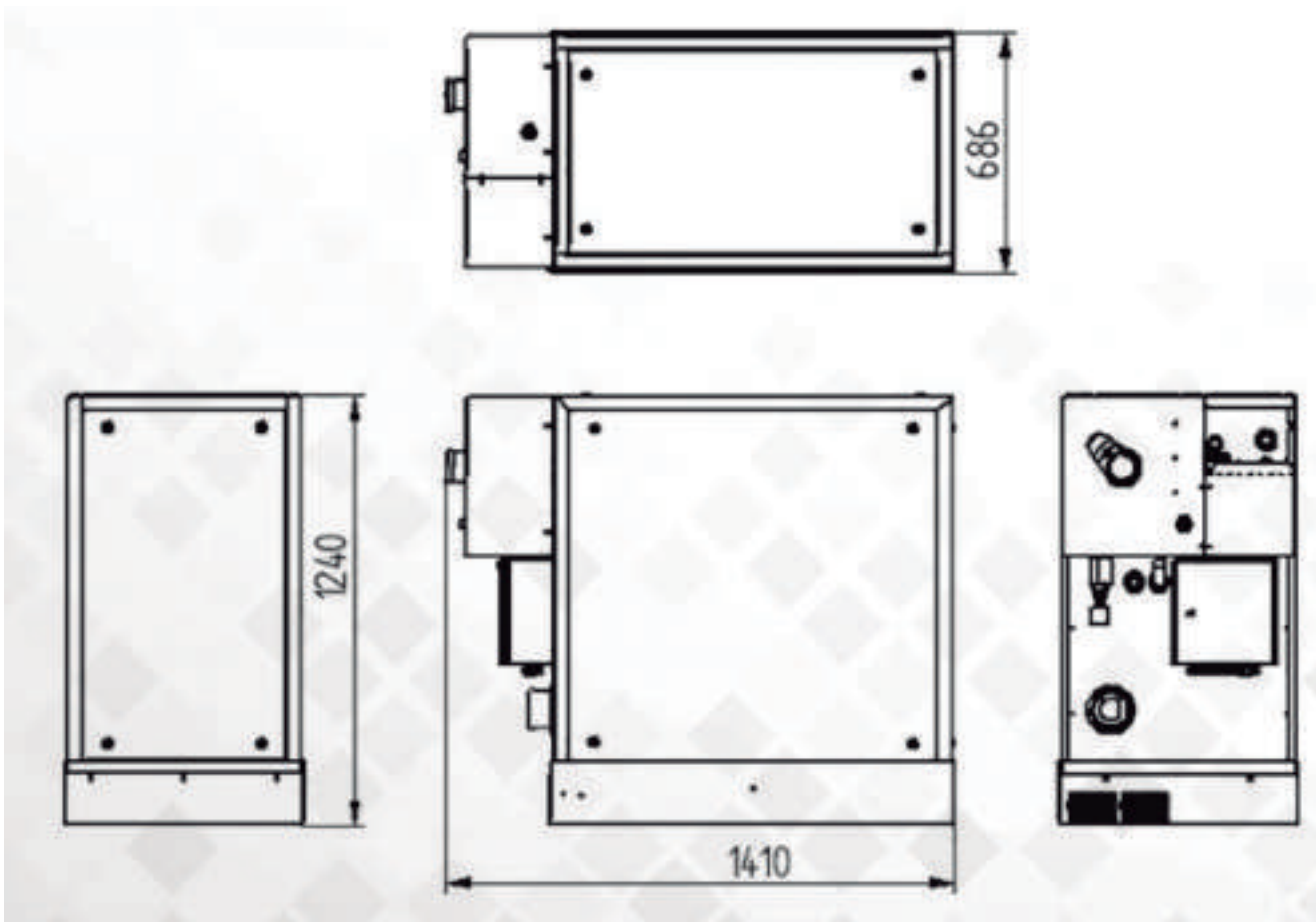
SPECIFICATIONS

PREMIUM M	neoTower® 11.0	neoTower® 16.0	neoTower® 20.0	neoTower® 21.0
Rated electrical output (1) [kWel]	11	16	20	21
Rated thermal output (2) [kWth]	25,3	37,8	45,7	48,1
Electrical output modulation [kWel]	7,5 - 11,0	9,5 - 16,0	10,7 - 20,0	10,7 - 21,0
Thermal output modulation [kWth]	20,6 - 25,3	26,4 - 37,8	29,1 - 45,7	29,1 - 48,1
fPe primary energy factor (3)	0,279	0,266	0,224	0,225
ErP energy efficiency label (4)	A++	A++	A++	A++
Maintenance interval [op. hrs]	8.500	6.000	6.000	6.000
EFFICIENCIES				
Electrical efficiency ratio el [%]	32,0	32,1	33,2	33,2
Thermal efficiency ratio th [%]	73,5	75,9	76,0	76,0
Total efficiency ratio tot [%]	105,5	108,0	109,2	109,2
HEAT EXTRACTION				
Permissible supply temperature max. [°C]	80	80	80	80
Permissible return temperature max. [°C]	25-65	25-65	25-65	25-65
ELECTRIC POWER GENERATION				
Nominal voltage [V]	400	400	400	400
Frequency [Hz]	50	50	50	50
Cos f acc. to VDE-AR-N 4105 quadrant II, III	0,95	0,95	0,95	0,95
start-up current Ik [A] approx.	59	59	59	59
MOTOR				
Motor manufacturer	Toyota	Toyota	Toyota	Toyota
Number of cylinders	4	4	4	4
Displacement [l]	2,2	2,2	2,2	2,2
Method of operation: air ratio λ	1,6	1,0	1,0	1,0
Engine oil [l]	59	59	59	59
GENERATOR				
Alternator type	asynchronous	asynchronous	asynchronous	asynchronous
Speed [rpm]	1.540	1.540	1.540	1.530
FUMES				
Flue gas temperature (5) [°C]	87	89	95	95
DIMENSIONS & WEIGHTS				
Dimensions of module L x W x H [mm]	1.410x686x1.240	1.410x686x1.240	1.410x686x1.240	1.410x686x1.240
Weight, approx. [kg]	725	725	725	725

- 1) Performance data in accordance with ISO 3046/1-2002, tolerance 5%
- 2) Thermal performance data tolerance 8%
- 3) fpe current = 2.8 displacement ratio according to DIN V 18599,
DIN V 4701-10, EnEV 2014 valid as of 01/01/2016
- 4) In accordance with EU Regulation 811/2013; 813/2013
- 5) At a return flow temperature of $\leq 30^{\circ}\text{C}$



DIMENSIONS



PREMIUM M+

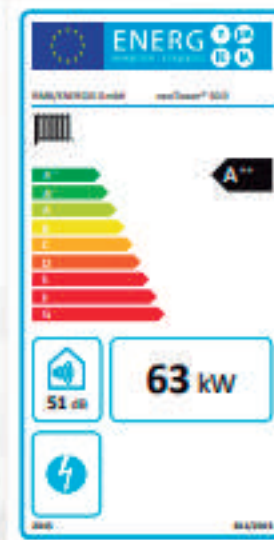
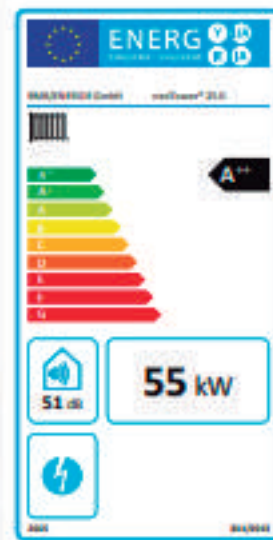
MICRO-COGENERATION SYSTEMS



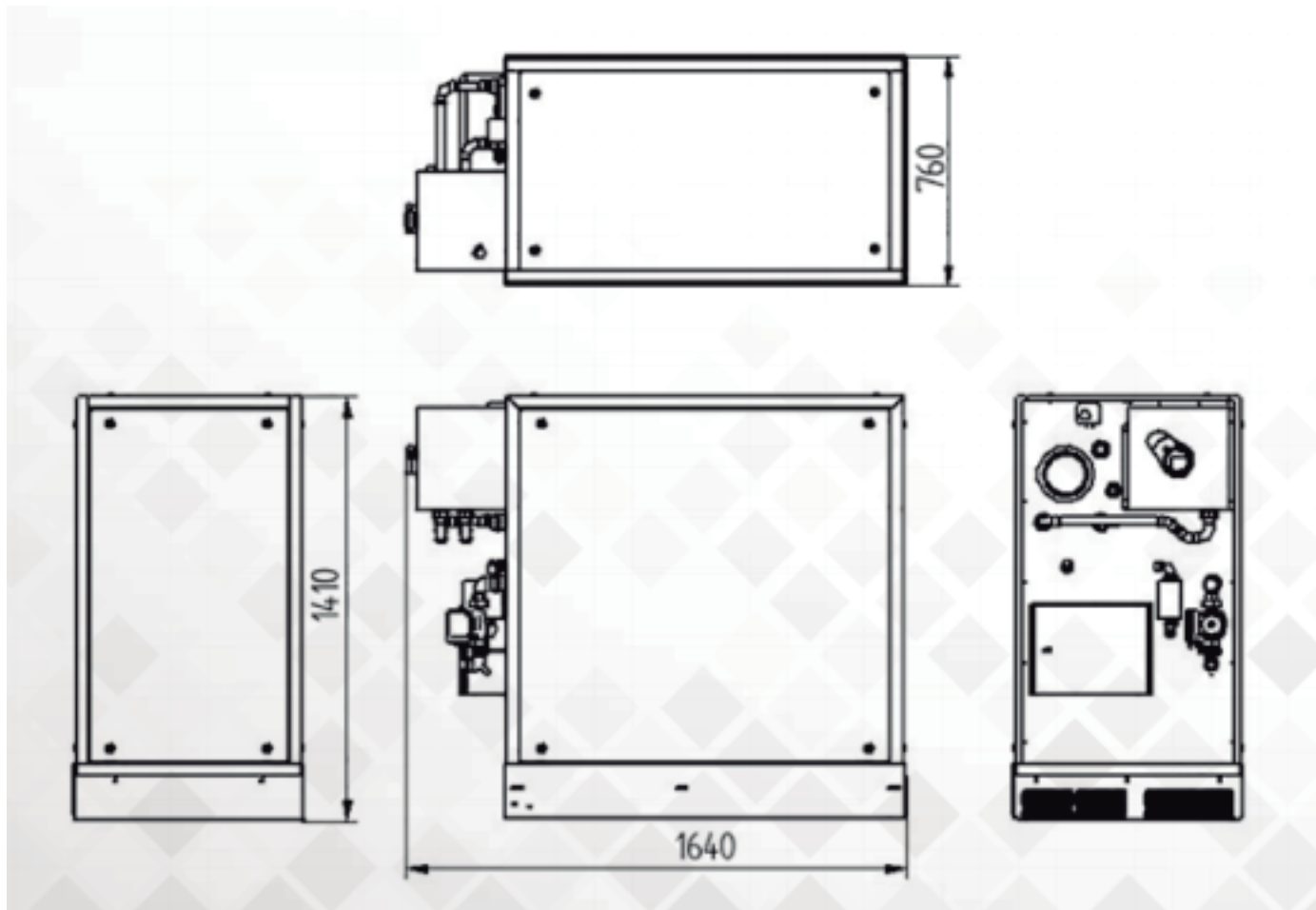
SPECIFICATIONS

PREMIUM M+	neoTower® 25.0	neoTower® 30.0
Rated electrical output (1) [kWel]	25	30
Rated thermal output (2) [kWth]	54,9	63,1
Electrical output modulation [kWel]	12,5 - 25,0	15,0 - 30,0
Thermal output modulation [kWth]	34,8 - 54,9	40,9 - 63,1
fPe primary energy factor (3)	0,266	0,229
ErP energy efficiency label (4)	A++	A++
Maintenance interval [op. hrs]	8.000	8.000
EFFICIENCIES		
Electrical efficiency ratio el [%]	32,5	33,5
Thermal efficiency ratio th [%]	71,4	70,5
Total efficiency ratio tot [%]	103,9	104,0
HEAT EXTRACTION		
Permissible supply temperature max. [°C]	80	80
Permissible return temperature max. [°C]	25-65	25-65
ELECTRIC POWER GENERATION		
Nominal voltage [V]	400	400
Frequency [Hz]	50	50
Cos φ acc. to VDE-AR-N 4105 quadrant II, III	0,95	0,95
start-up current Ik [A] approx.	59	59
MOTOR		
Motor manufacturer	YANMAR	YANMAR
Number of cylinders	4	4
Displacement [l]	3,3	3,3
Method of operation: air ratio λ	1,0	1,0
Engine oil [l]	110	110
GENERATOR		
Alternator type	asynchronous	asynchronous
Speed [rpm]	1.530	1.530
FUMES		
Flue gas temperature (5) [°C]	95	95
DIMENSIONS & WEIGHTS		
Dimensions of module L x W x H [mm]	1.640x760x1.410	1.640x760x1.410
Weight, approx. [kg]	1.120	1.120

- 1) Performance data in accordance with ISO 3046/I-2002, tolerance 5%;
- 2) Thermal performance data tolerance 8%;
- 3) fpe current = 2.8 displacement ratio according to DIN V 18599,
DIN V 4701-10, EnEV 2014 valid as of 01/01/2016;
- 4) In accordance with EU Regulation 811/2013; 813/2013
- 5) At a return flow temperature of $\leq 30^{\circ}\text{C}$



DIMENSIONS



PREMIUM L

MICRO-COGENERATION SYSTEMS



SPECIFICATIONS

PREMIUM L
Rated electrical output (1) [kWel]
Rated thermal output (2) [kWth]
Electrical output modulation [kWel]
Thermal output modulation [kWth]
fPe primary energy factor (3)
Maintenance interval [op. hrs]
Electrical efficiency ratio el [%]
Thermal efficiency ratio th [%]
Total efficiency ratio tot [%]
Permissible supply temperature max. [°C]
Permissible return temperature max. [°C]
Nominal voltage [V]
Frequency [Hz]
Cos f acc. to VDE-AR-N 4105 quadrant II, III
start-up current Ik [A] approx.
Motor manufacturer
Number of cylinders
Displacement [l]
Method of operation: air ratio λ
Engine oil [l]
Alternator type
Speed [rpm]
Flue gas temperature (5) [°C]
Dimensions of module L x W x H [mm]
Weight, approx. [kg]

neoTower [®] 50.0 default	neoTower [®] 50.0 high temperature	neoTower [®] 50.0 condensing
50	50	50
85	80	100
25,0 - 50,0	25,0 - 50,0	25,0 - 50,0
52,6 - 85,0	49,5 - 80,0	60,2 - 100,0
0,203	0,216	0,172
3.000	3.000	3.000
EFFICIENCIES		
35,0	35,0	35,0
59,4	55,9	69,9
94,4	90,9	104,9
HEAT EXTRACTION		
80	93	80
25-65	83	25-65
ELECTRIC POWER GENERATION		
400	400	400
50	50	50
0,95	0,95	0,95
no starting current: battery starting system		
MOTOR		
MAN	MAN	MAN
4	4	4
4,6	4,6	4,6
1,0	1,0	1,0
180	180	180
GENERATOR		
asynchronous	asynchronous	asynchronous
1.500	1.500	1.500
FUMES		
95	100	85
DIMENSIONS & WEIGHTS		
2.180x798x1.670	2.180x798x1.670	2.180x798x1.670
1.650 - 1.860	1.650 - 1.860	1.650 - 1.860

