

TECHNICAL BOOKLET

1. REFERENCE PICTURES



2. FEATURES AND ADVANTAGES

Denair portable screw air compressors are widely used in all kinds of heavy duty industries, such as mining, hydropower, oil and gas exploitation, borehole, shipyard, construction, chemical industry, quarry, sandblasting, pipeline pressure test, public works, etc.. Free air delivery can be 3.2 m³/min up to 39 m³/min, working pressure can be 7bar up to 35bar, which makes these compressors suitable for almost any application.

Advanced Compression Element & Powerful Engine

- Use Germany KAPP machine and German manufacturing technique to process the compression element, the surface accuracy is 5 microns, the newest SAP Shaped line, male rotor gear: female rotor gear=5:6, size is 20% bigger and energy saving 15% than common screw element, ensure long service life with maximum reliability.
- Heavy-duty CUMMINS or other famous diesel engine for extended operation. Adopt exhaust turbocharging technology to improve the dynamic property and reduce the fuel consumption. Big capacity fuel tank keeps the compressor continuous running for 10 hours to save the refueling time.

Safe & Reliable Performance

- Monitoring and warning system are equipped for monitoring the operation any time.



No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

- The rainproof and dustproof design for body of compressor to improve the protection level.
- Excellent components, for example, Germany MANN oil filter and Siemens electronics for high performance. 0~100% capacity is adjusted continuously and automatically.

Energy-Saving & Environmental Protection

- Less pollution and less harmful gas emissions conform to international and European environmental standards, such as CE, ISO9001 and energy saving certification, etc..
- Thick sound proofing for super low noise level. The internal wall of compressor adopts a new kind of special flame-retardant sound-proof material, specialized sealed rubber is used around the door, which can greatly absorb and reduce the noise and heat discharged by the machine during operation.

Easy to Operate & Maintain

- Automatic operation system helps the operator to master the operating skills quickly, unattended operation and remote control are available.
- High-end configuration, durable parts, less quick-wear parts to save the maintenance time and cost.
- Design of Gull-wing opening door, dismantlable shutters and reasonable layout of parts ensure the best space and convenience for maintenance.

Main Components List

Component Name	Brand Logo	Brand Origin
Air end		Germany
Diesel engine		USA
Bearing		Sweden
Air intake valve		Austria
Pressure sensor		France
Temperature sensor		France
Air filter		Germany
Oil filter		Germany
Oil separator		Germany
Coupling		Germany
Lubricant		Netherlands



No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

3. TECHNICAL SPECIFICATIONS

Model	Unit	DACY-5.3/7
Free Air Delivery	CFM	190
Working pressure	Psi	102
Type		rotary screw
Ambient temperature	°C	≤ 50
Lubricant capacity	L	25
Discharge outlet quantity		G3/4" x 1; G1-1/4" x 1
Wheel quantity		2
Dimensions (L*W*H)	mm	2900*1880*1540 (without tow bar)
Weight	Kg	1700
Diesel Engine		
Make		Cummins
Model		4BT3.9-C80
Type		Vertical, in-line, water cooled, 4-stroke
Aspiration		Turbocharged
No. of cylinders		4
Bore and stroke	mm	102 x 120
Engine speed (nominal)	RPM	2000
Engine speed (unloaded)	RPM	1400
Rated power		60kW/80HP
Engine oil capacity	L	12
Coolant capacity	L	20
Fuel tank capacity	L	109
Storage battery		24V 120Ah



No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

Model	Unit	DACY-7.5/7
Free Air Delivery	CFM	265
Working pressure	Psi	102
Type		rotary screw
Ambient temperature	°C	≤ 50
Lubricant capacity	L	25
Discharge outlet quantity		G3/4" x 1; G1-1/4" x 1
Wheel quantity		2
Dimensions (L*W*H)	mm	2900*1880*1540 (without tow bar)
Weight	Kg	1700
Diesel Engine		
Make		Cummins
Model		4BTA3.9-C80
Type		Vertical, in-line, water cooled, 4-stroke
Aspiration		Turbocharged
No. of cylinders		4
Bore and stroke	mm	102 x 120
Engine speed (nominal)	RPM	2000
Engine speed (unloaded)	RPM	1400
Rated power		60kW/80HP
Engine oil capacity	L	12
Coolant capacity	L	20
Fuel tank capacity	L	109
Storage battery		24V 120Ah



No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

Model	Unit	DACY-12/7
Free Air Delivery	CFM	424
Working pressure	Psi	102
Type		rotary screw
Ambient temperature	°C	≤ 50
Lubricant capacity	L	50
Discharge outlet quantity		G1''*1; G1-1/2''*1
Wheel quantity		2
Dimensions (L*W*H)	mm	3080*2020*2140 (without tow bar)
Weight	Kg	2900
Diesel Engine		
Make		Cummins
Model		6BT5.9-C150
Type		Vertical, in-line, water cooled, 4-stroke
Aspiration		Turbocharged
No. of cylinders		6
Bore and stroke	mm	102 x 120
Engine speed (nominal)	RPM	2500
Engine speed (unloaded)	RPM	1400
Rated power		110kW/150HP
Engine oil capacity	L	14
Coolant capacity	L	30
Fuel tank capacity	L	130
Storage battery		24V 135Ah



No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

Model	Unit	DACY-21/8
Free Air Delivery	CFM	742
Working pressure	Psi	116
Type		rotary screw
Ambient temperature	°C	≤ 50
Lubricant capacity	L	80
Discharge outlet quantity		G1''*1; G2''*1
Wheel quantity		4
Dimensions (L*W*H)	mm	3900*3240*1740 (without tow bar)
Weight	Kg	3900
Diesel Engine		
Make		Cummins
Model		6CTA8.3-C215
Type		Vertical, in-line, water cooled, 4-stroke
Aspiration		Turbocharged
No. of cylinders		6
Bore and stroke	mm	114 x 135
Engine speed (nominal)	RPM	2200
Engine speed (unloaded)	RPM	1500
Rated power		160kW/215HP
Engine oil capacity	L	15
Coolant capacity	L	50
Fuel tank capacity	L	360
Storage battery		24V 165Ah



No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

Model	Unit	DACY-8.5/10
Free Air Delivery	CFM	300
Working pressure	Psi	145
Type		rotary screw
Ambient temperature	°C	≤ 50
Lubricant capacity	L	40
Discharge outlet quantity		G1''*1; G1-1/2''*1
Wheel quantity		2
Dimensions (L*W*H)	mm	2720*2060*2240 (without tow bar)
Weight	Kg	2900
Diesel Engine		
Make		Cummins
Model		4BTA3.9-C125
Type		Vertical, in-line, water cooled, 4-stroke
Aspiration		Turbocharged
No. of cylinders		4
Bore and stroke	mm	102 x 120
Engine speed (nominal)	RPM	2200
Engine speed (unloaded)	RPM	1400
Rated power		93kW/125HP
Engine oil capacity	L	12
Coolant capacity	L	30
Fuel tank capacity	L	165
Storage battery		24V 135Ah



No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

Model	Unit	DACY-27/10
Free Air Delivery	CFM	953
Working pressure	Psi	145
Type		rotary screw
Ambient temperature	°C	≤ 50
Lubricant capacity	L	110
Discharge outlet quantity		G1" *1; G2" *1
Wheel quantity		4
Dimensions (L*W*H)	mm	4230*1990*2500 (without tow bar)
Weight	Kg	4400
Diesel Engine		
Make		Cummins
Model		6LTAA8.9-C325
Type		Vertical, in-line, water cooled, 4-stroke
Aspiration		Turbocharged
No. of cylinders		6
Bore and stroke	mm	114 x 145
Engine speed (nominal)	RPM	2200
Engine speed (unloaded)	RPM	1500
Rated power		239kW/325HP
Engine oil capacity	L	30
Coolant capacity	L	55
Fuel tank capacity	L	590
Storage battery		24V 180Ah



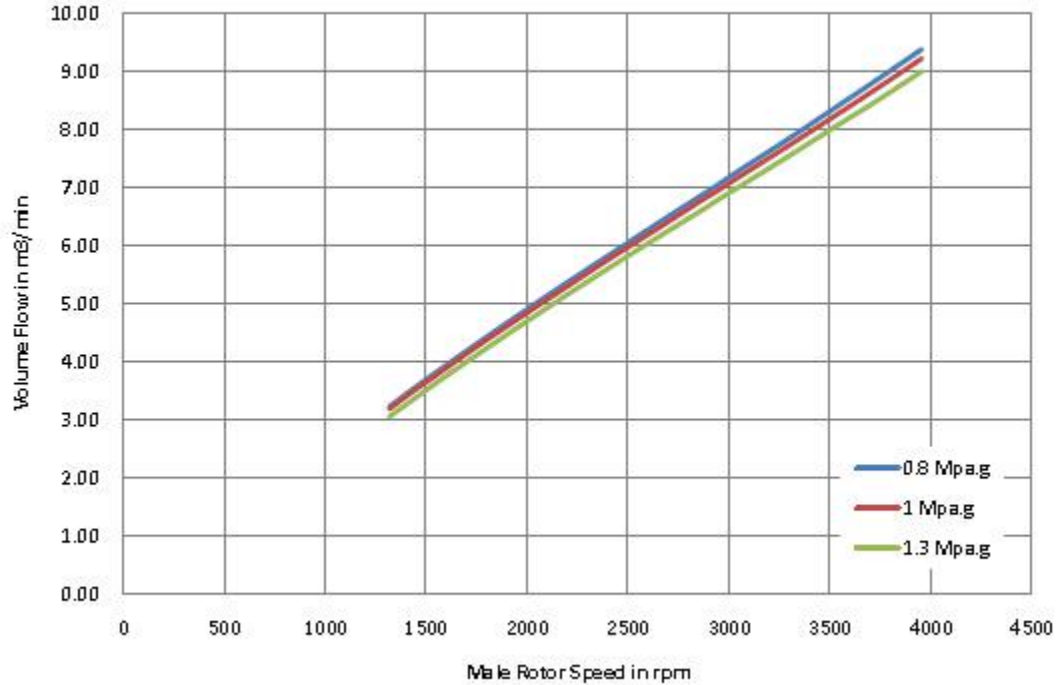
No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

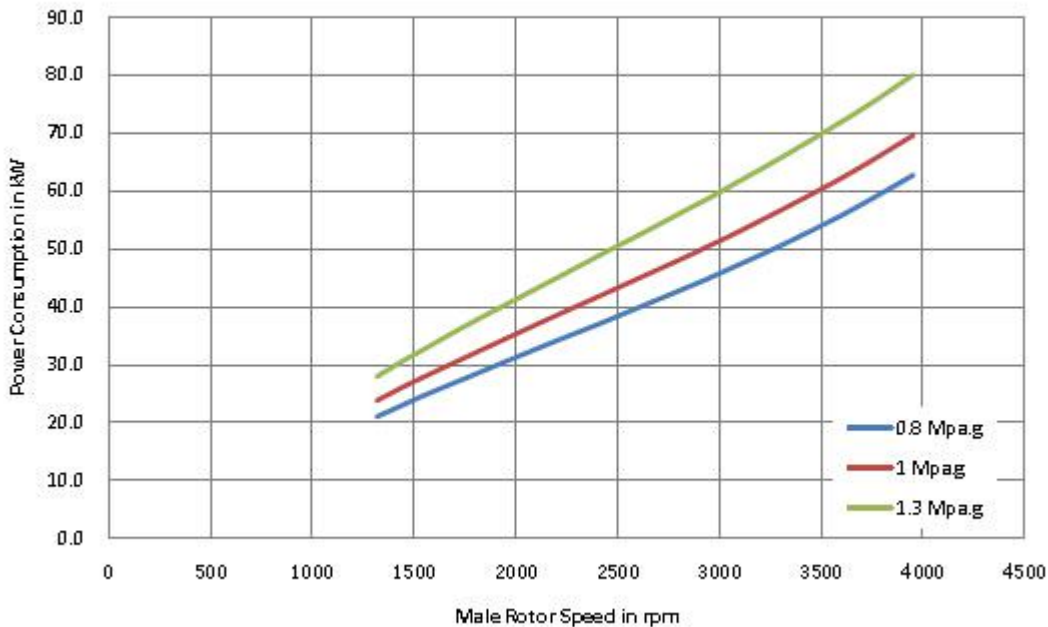
4. AIR END PERFORMANCE CURVE

4.1. DACY-5.3/7(190CFM @ 102PSI)

Performance Curve



Performance Curve



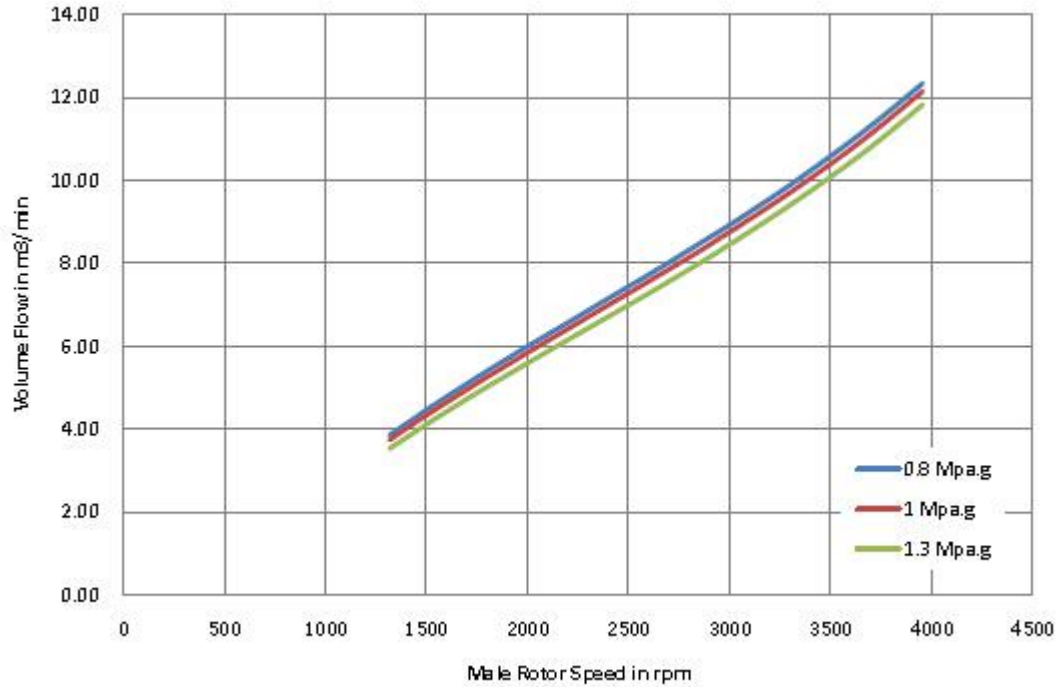


No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

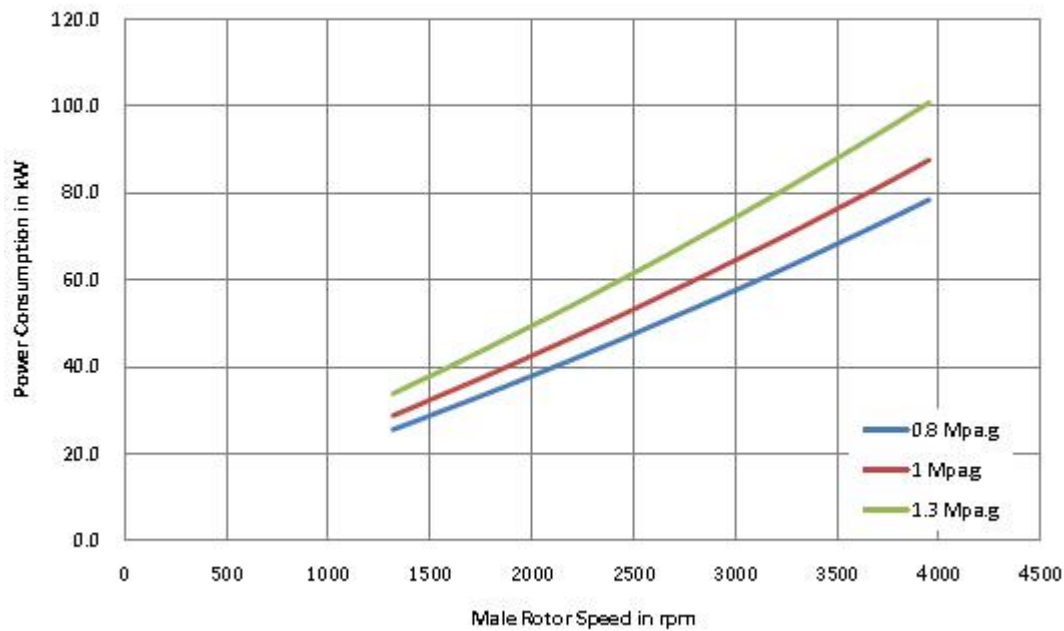
Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

4.2. DACY-7.5/7(265CFM @ 102PSI)

Performance Curve



Performance Curve



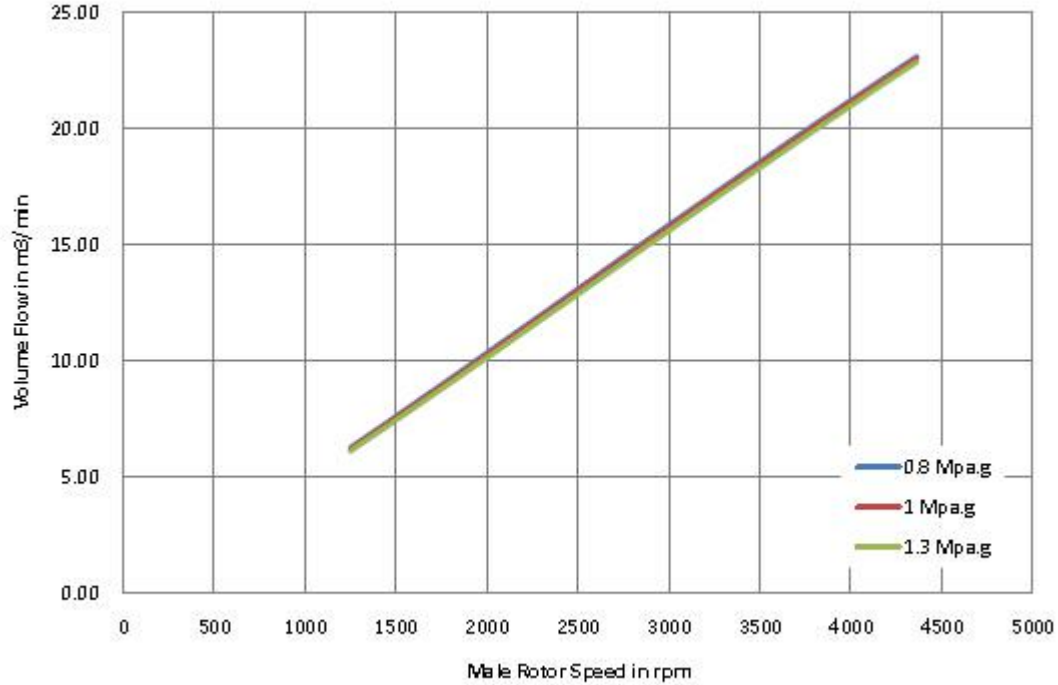


No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

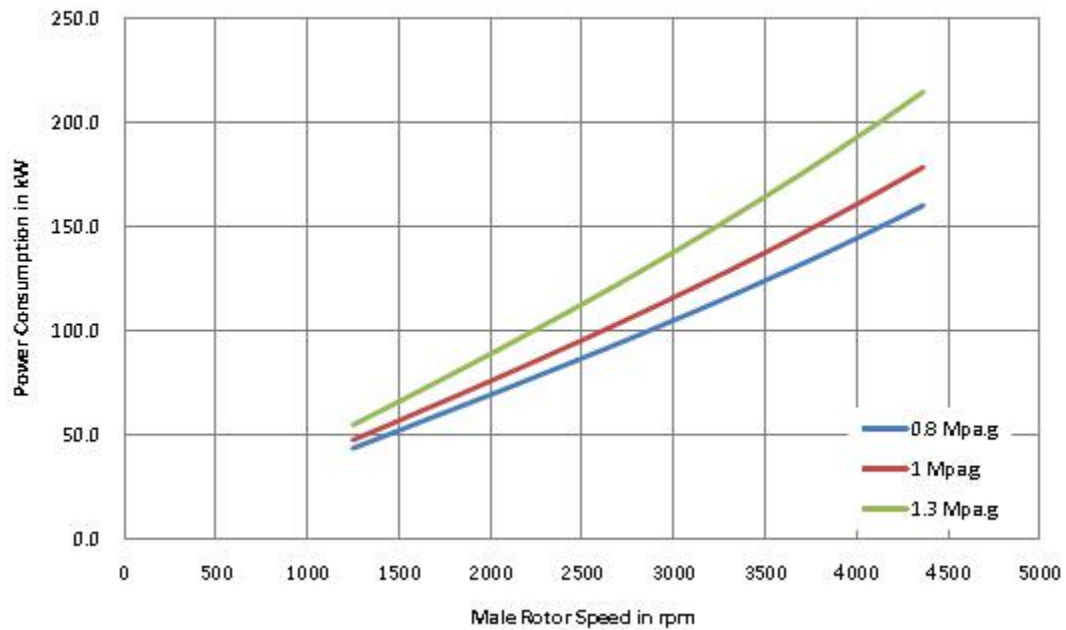
Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

4.3. DACY-12/7(424CFM @ 102PSI)

Performance Curve

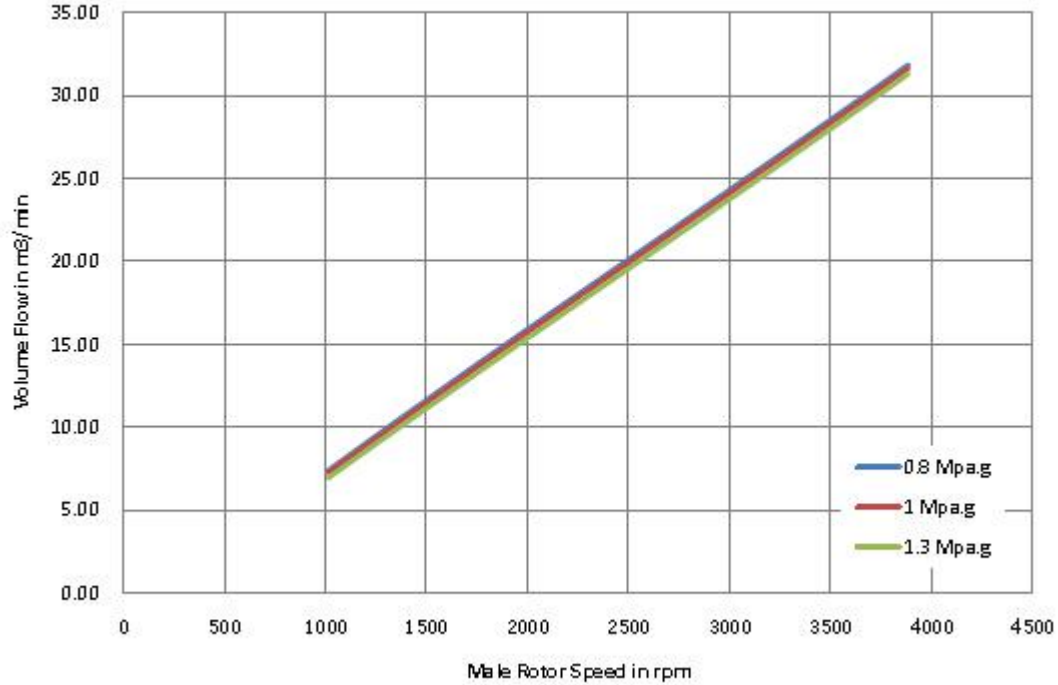


Performance Curve

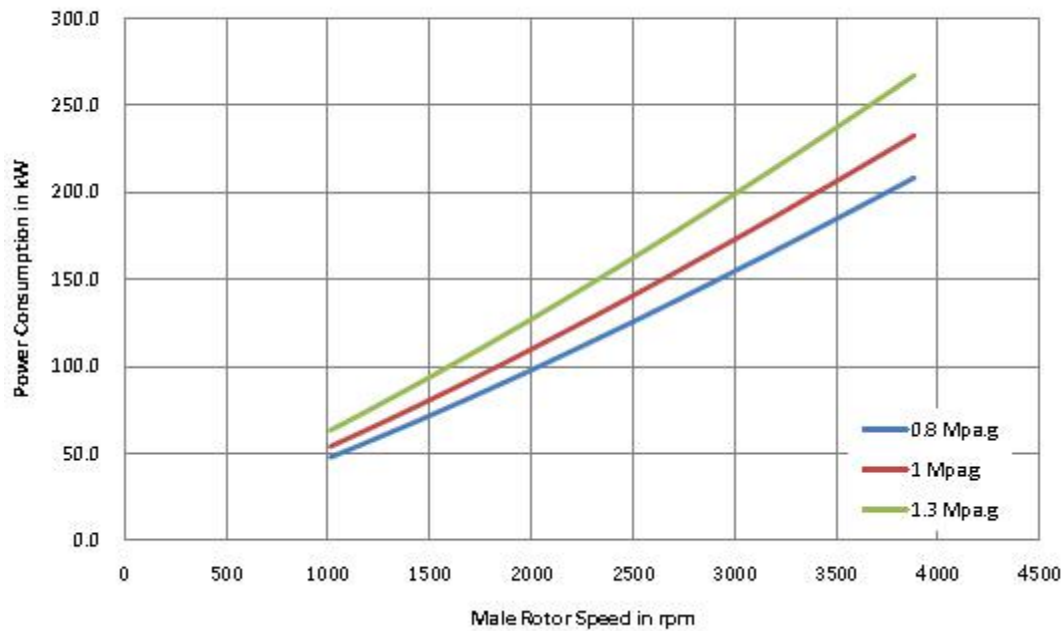


4.4. DACY-21/8(742CFM @ 116PSI)

Performance Curve



Performance Curve



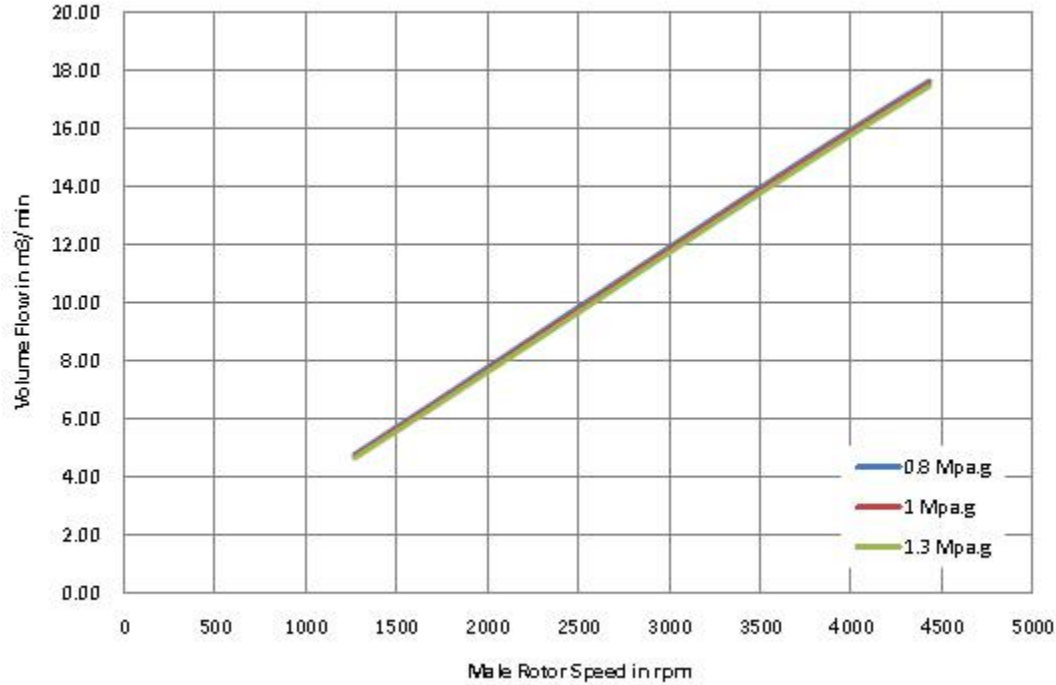


No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

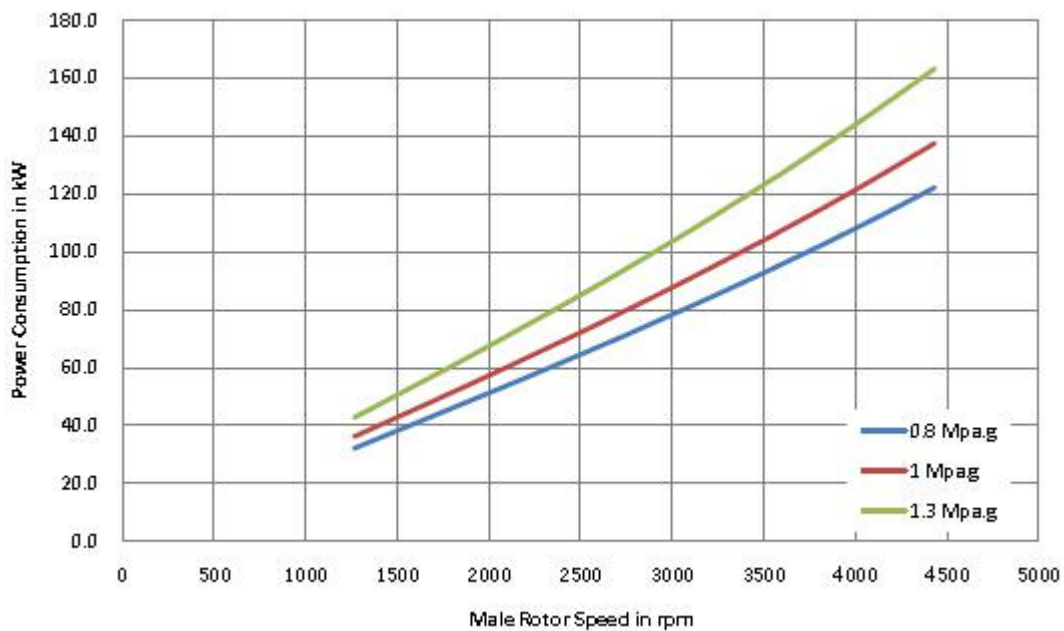
Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

4.5. DACY-8.5/10(300CFM @ 145PSI)

Performance Curve

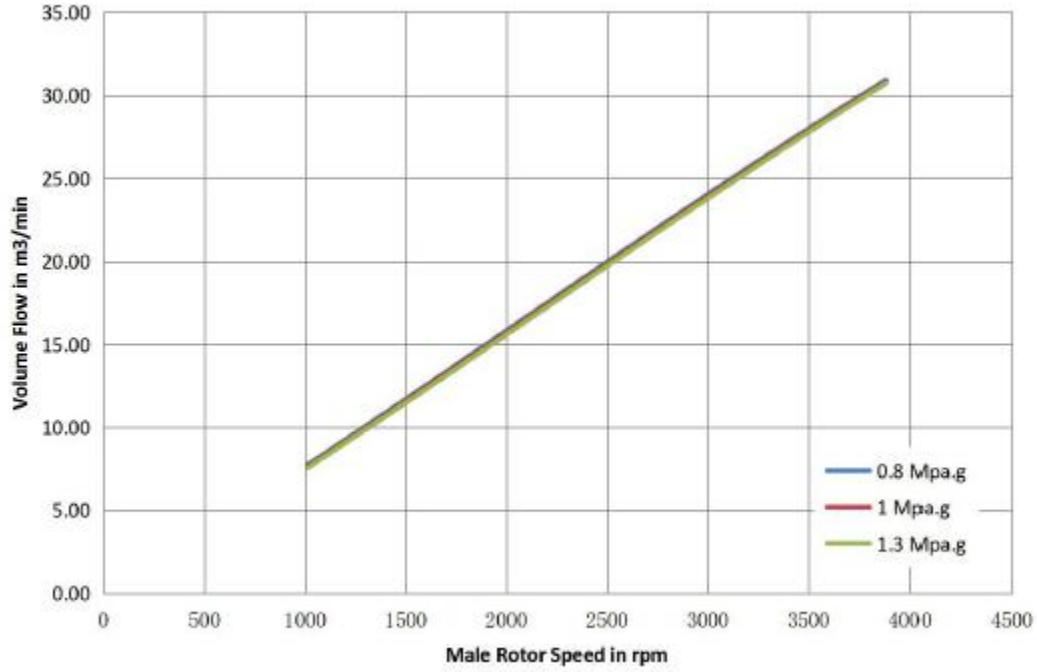


Performance Curve

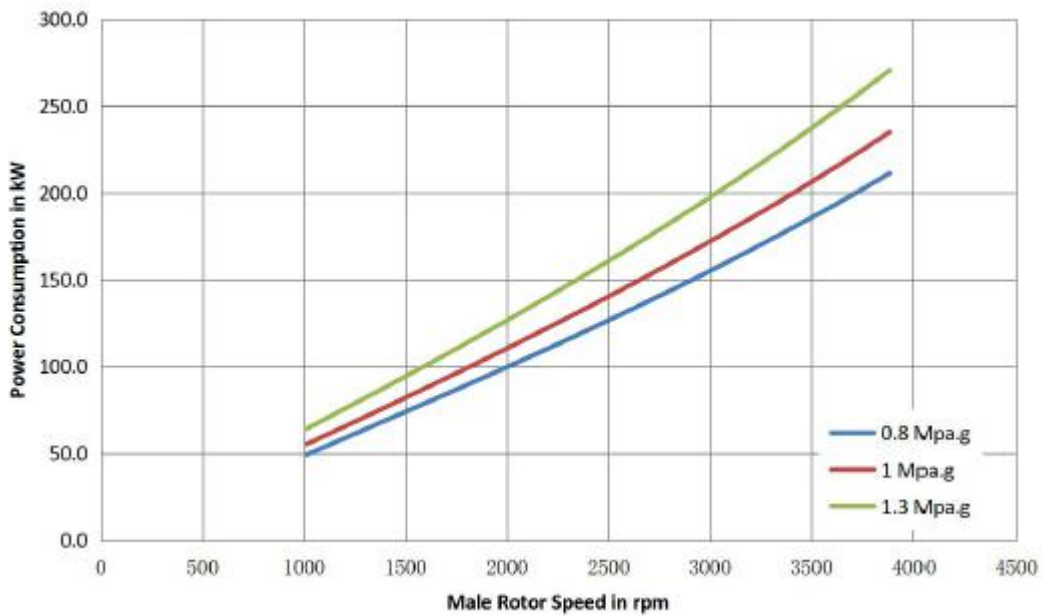


4.6. DACY-27/10(953CFM @ 145PSI)

Performance Curve



Performance Curve



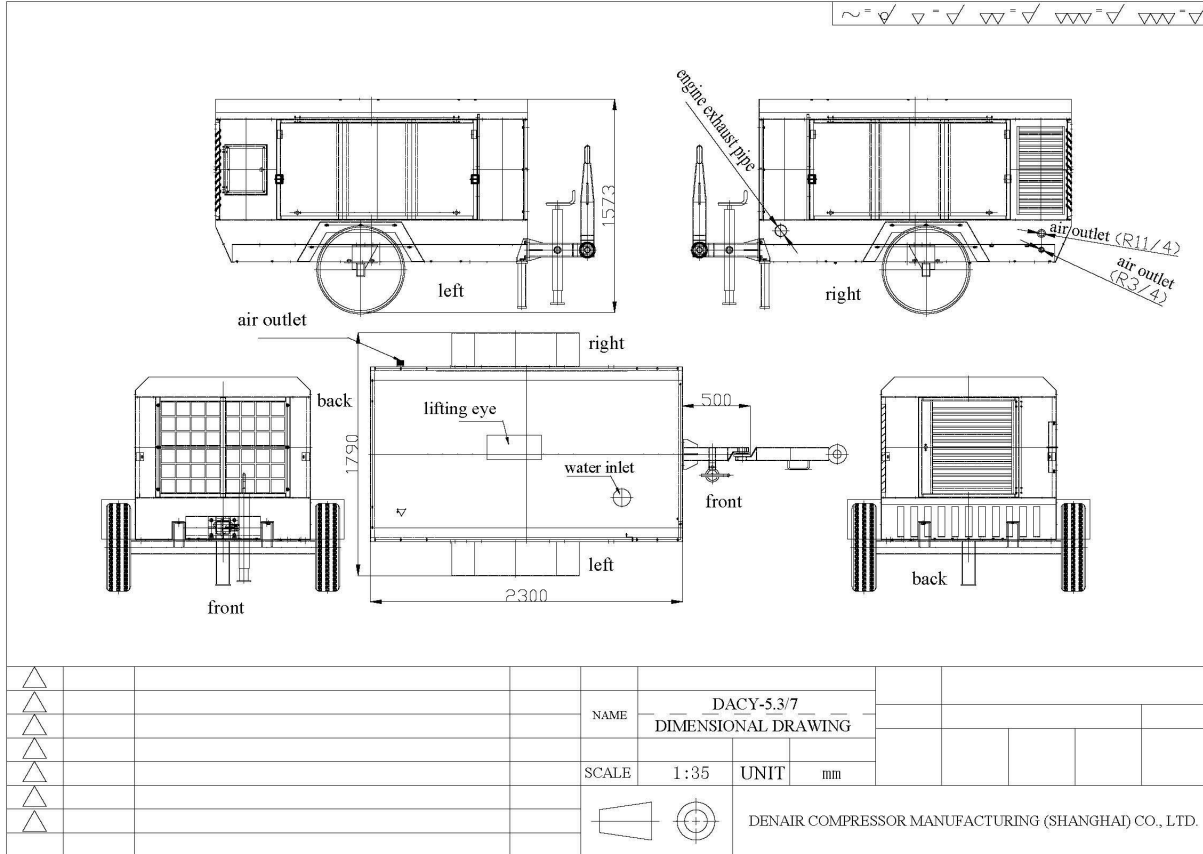


No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

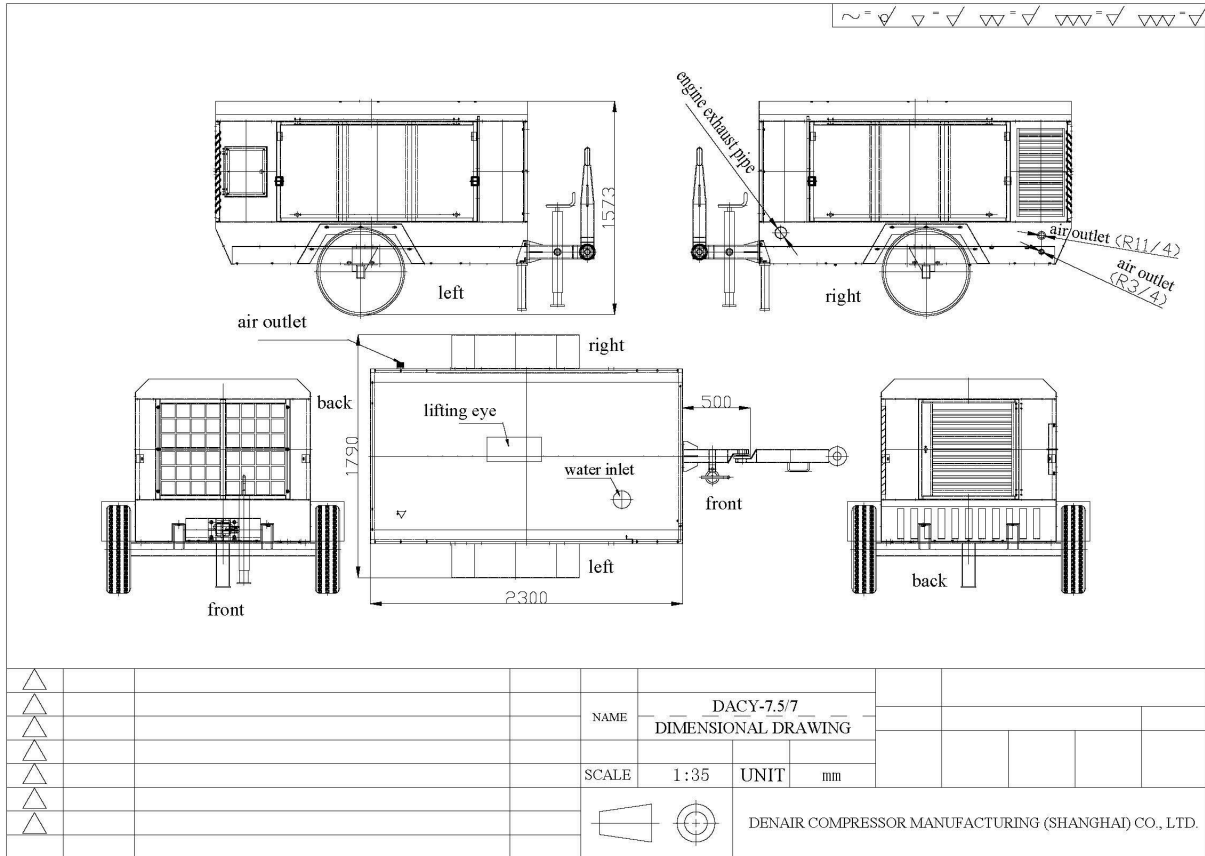
Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

5. DIMENSIONAL DRAWING

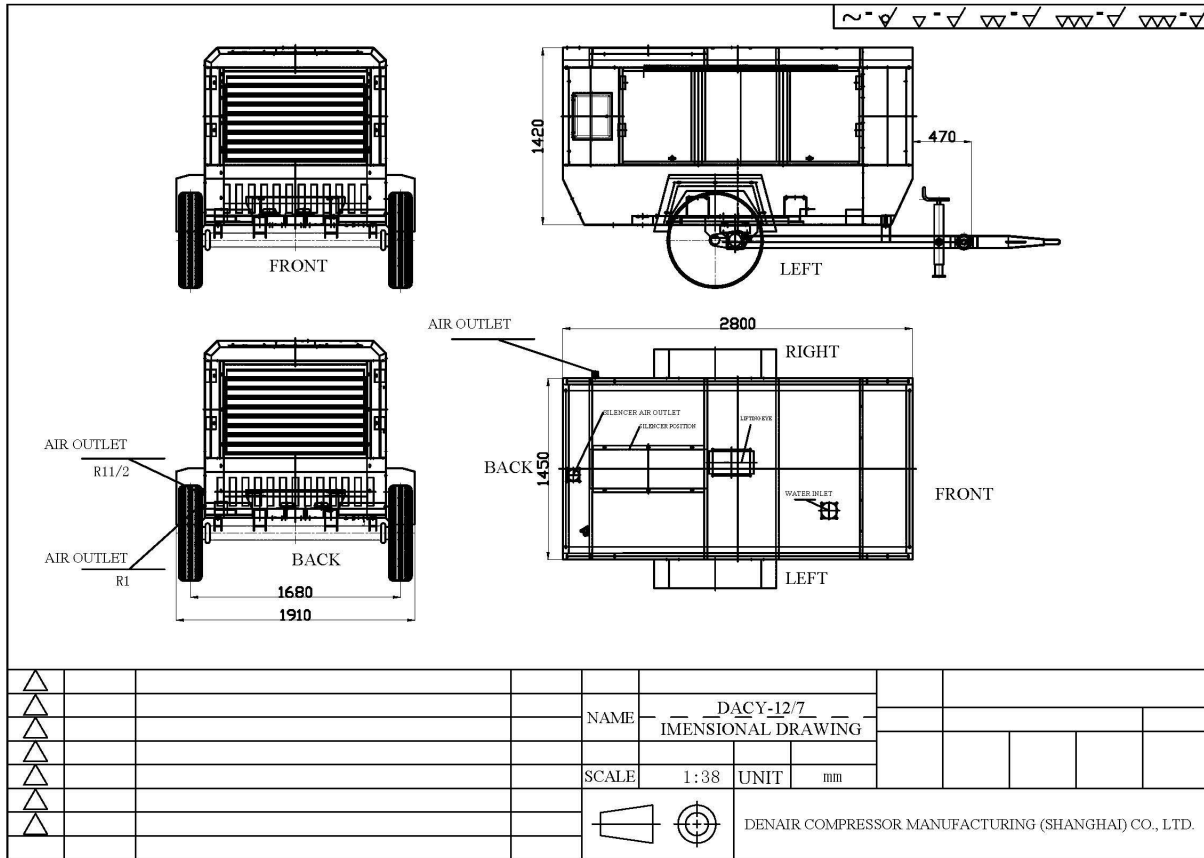
5.1. DACY-5.3/7(190CFM @ 102PSI)



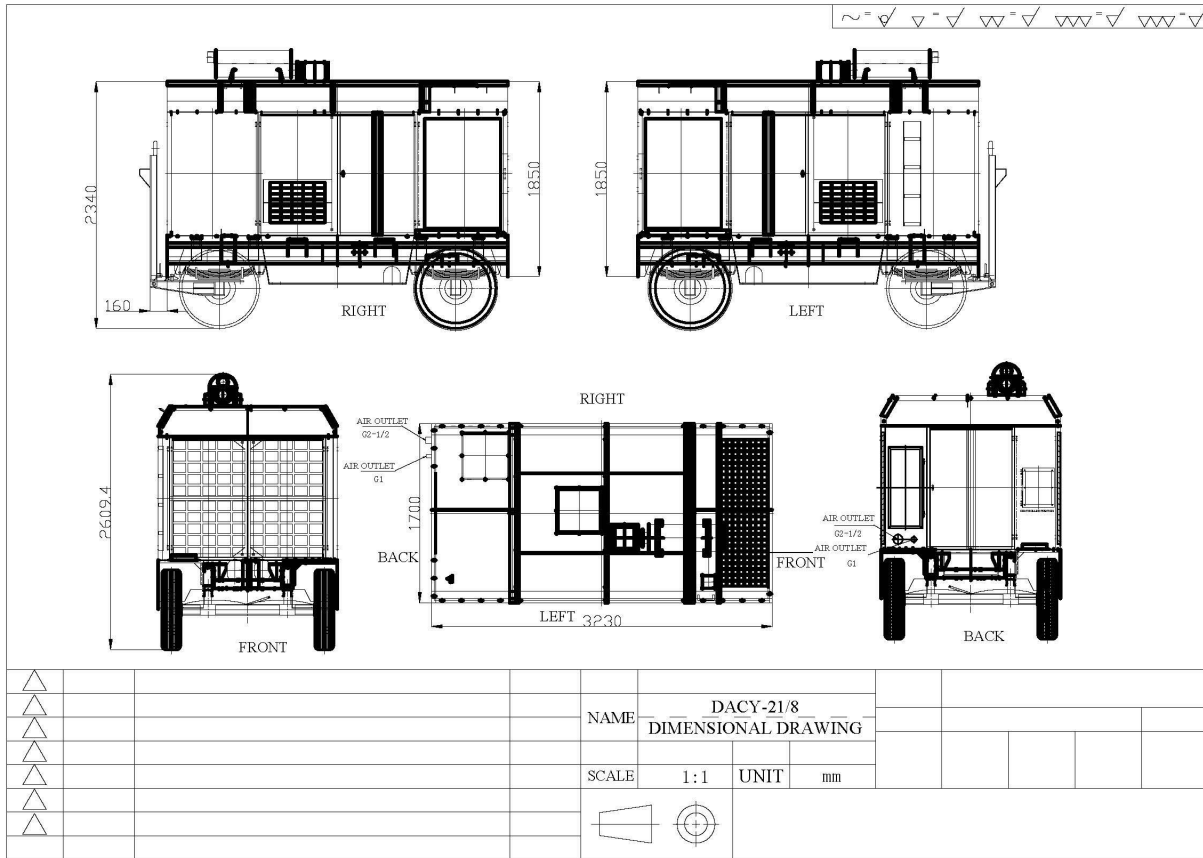
5.2. DACY-7.5/7(265CFM @ 102PSI)



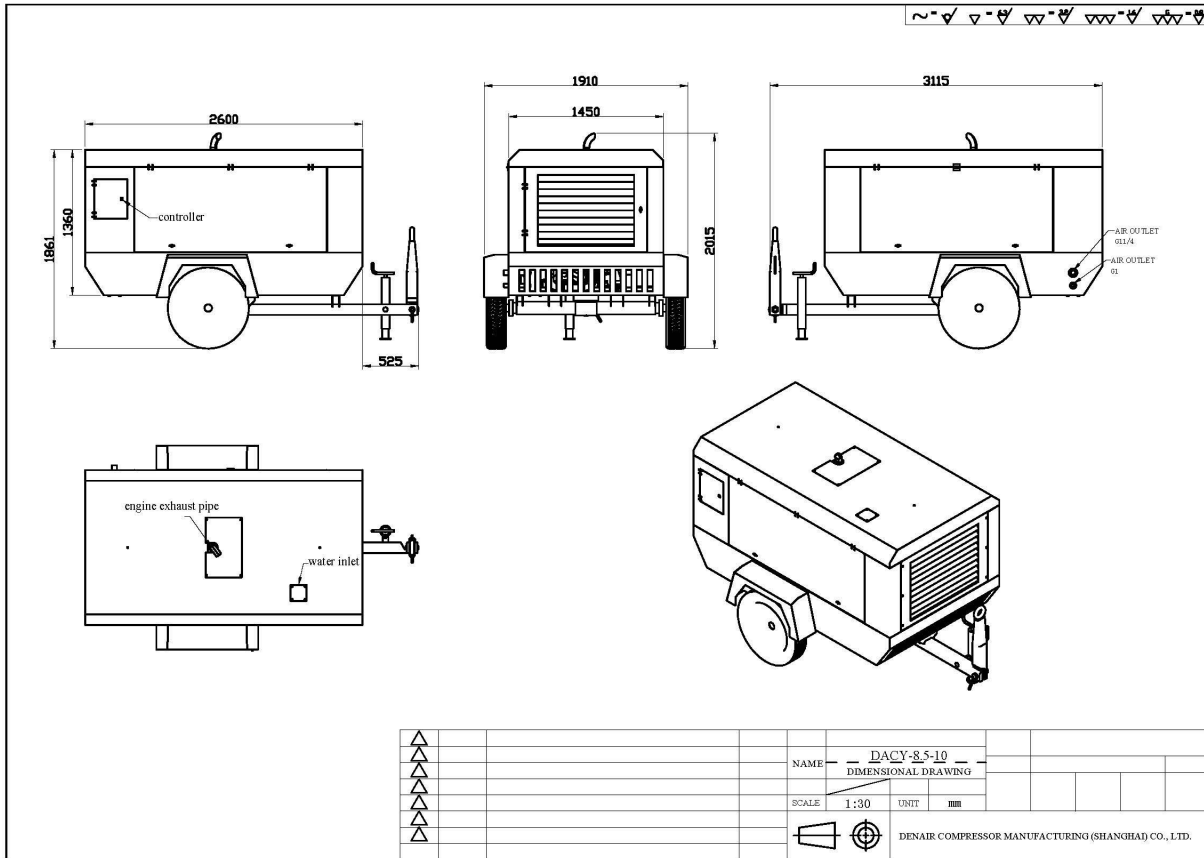
5.3. DACY-12/7(424CFM @ 102PSI)



5.4. DACY-21/8(742CFM @ 116PSI)



5.5. DACY-8.5/10(300CFM @ 145PSI)

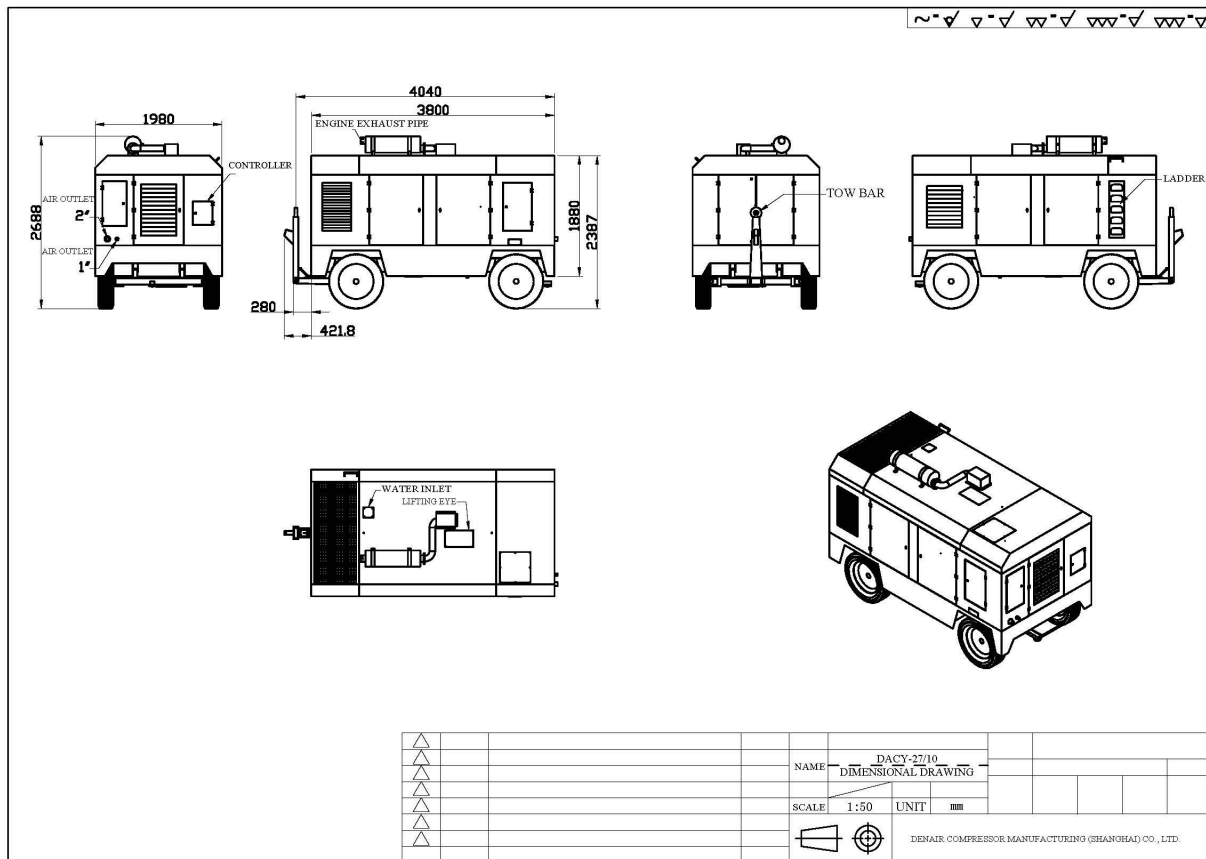




No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

5.6. DACY-27/10(953CFM @ 145PSI)





No.10 Xinghao Rd., Jinshan District, Shanghai 201502, PRC.

Website: www.denair.net E-mail: ashley.yan@denair.net Tel: +86 (0)21 6127 8021

6. CERTIFICATES

