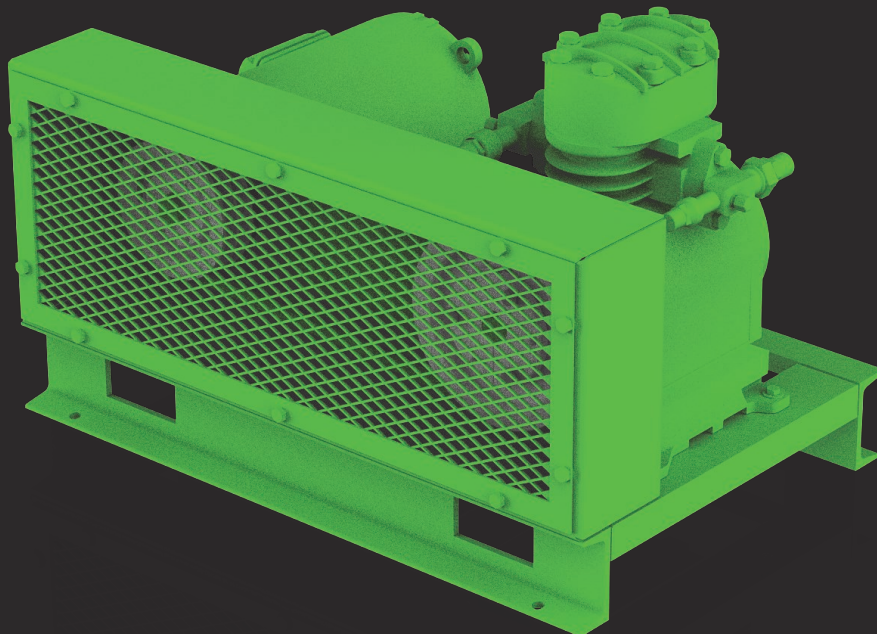




RECIPROCATING **BELT DRIVE ASSEMBLY**

RB





TECHNICAL FEATURES (RB)

Compressor

- Highly efficient reciprocating piston design
- Extremely robust valve plate design
- Crankshaft with special surface finish, optimized piston shape and chromium-plated piston rings guarantee low frictional losses and long service life.
- Suction and discharge shut-off valves

Compressor [2T.2(Y)/W2TA..6F.2(Y)/W6FA]:

- Pressure oil lubrication by means of reversible gear pump.
- Shaft seal cooled by a pressurized oil stream and also by the return gas flow resulting in excellent stability and thermal load.
- Unloading of cylinder heads via blocked suction (4 & 6 Cylinder Only)
- Max. pressure (LP/HP): 275 / 400 psi
- Built-in pressure relief valve for 4G.2(Y)/W4GA...6F.2(Y)/W6FA

Refer to KP-525 for more information on compressor and performance data

Compressor [0(Y)..WV7(Y),IIA,IIIA]:

- Widely insensitive to liquid slugging due to robust design and low speed
- Max. pressure (LP/HP): 333 psi

Refer to KP-515 for more information on compressor and performance data

Motor

- NEMA premium efficiency C-face motor
- Nominal 1,800 rpm at 60Hz
- Wide range of motors and compressor combinations available
 - Smaller motor ranges suitable for booster applications
- Enclosure Option:
 - TEFC (Totally Enclosed Fan Cooled) / IP 55 enclosure. Can be used for indoor/outdoor applications. Inverter rated at 20:1 for constant torque. Premium quality motor.
 - ODP (Open Drip Proof) / IP23 enclosure. Typically used for indoor applications only. Inverter rated at 4:1 for constant torque

Motor Options (Contact factory for item number configuration)

- Thermistors embedded in windings of motor
- Recommended for use with VFD:
 - NEMA Frames 404/5 and larger: Insulated bearings and grounding of the shaft through Aegis ring
 - NEMA Frames 364/5 and smaller: Grounding of the shaft through Aegis ring
- Heaters embedded in windings of motors

Assembly

- Compressor and motor mounted on rigid frame and connected via pulley, flywheel, and belts.
 - Wide range of pulleys allows many compressor speed options
- Motor sits on a motor base for easy tensioning of belts
- Sturdy steel guard with diamond mesh allows safe operation with viewing access
- Frame:
 - Rigid structural steel frame
 - Forklift holes for ease of transportation

MODEL NUMBER DESIGNATION

R	B	W	4	G	A	-	0	5	0	2	L	A
---	---	---	---	---	---	---	---	---	---	---	---	---

Model

R = Reciprocating compressor

R	B	W	4	G	A	-	0	5	0	2	L	A
---	---	---	---	---	---	---	---	---	---	---	---	---

Drive type

D = Direct drive

B = Belt drive

R	B	W	4	G	A	-	0	5	0	2	L	A
---	---	---	---	---	---	---	---	---	---	---	---	---

Compressor model

E.g.: 4G2Y, W4NA, IIIY...

R	B	W	4	G	A	-	0	5	0	2	L	A
---	---	---	---	---	---	---	---	---	---	---	---	---

Horsepower

3 digits required

R	B	W	4	G	A	-	0	5	0	2	L	A
---	---	---	---	---	---	---	---	---	---	---	---	---

Voltage and motor type

1 = 208-230/3/60; TEFC/IP55

2 = 208/230-460/3/60; TEFC/IP55

4 = 440-480/3/60; TEFC/IP55

5 = 575/3/60; TEFC/IP55

6 = 208-230/3/60; ODP/IP23

7 = 208/230-460/3/60; ODP/IP23

8 = 440-480/3/60; ODP/IP23

9 = 575/3/60; ODP/IP23

0 = 115/1/60; ODP /I23

R	B	W	4	G	A	-	0	5	0	2	L	A
---	---	---	---	---	---	---	---	---	---	---	---	---

Terminal box mount (looking at the shaft)

L = Left mount

R = Right mount

T = Top mount

R	B	W	4	G	A	-	0	5	0	2	L	A
---	---	---	---	---	---	---	---	---	---	---	---	---

Variant

A = Ammonia (NH₃) compressor

Note: Additional suffix may exist for BOM variations



COMPRESSOR/MOTOR HORSEPOWER COMBINATIONS

Compressor Model	TEFC/ODP Motor (HP)	NEMA Frame Size	Compressor Shaft Diameter	Motor Shaft Diameter	RPM Range	RPM*	Compressor Pulley	Motor Pulley	
2T.2, W2TA, 2N.2, W2NA	3	182TC	32 mm	1-1/8"	750-1750	1750	8"	8"	
	5	184TC		1-3/8"					
	7.5	213TC							
	10	215TC							
4T.2, W4TA, 4P.2, W4PA, 4N.2, W4NA	7.5	213TC	42 mm	1-3/8"	750-1750	1750	8"	8"	
	10	215TC		1-5/8"					
	15	254TC							
	20	256TC							
4H.2, W4HA, 4G.2, W4GA, 6H.2, W6HA, 6G.2, W6GA, 6F.2, W6FA	15	254TC	Tapered	1-5/8"	4 Cyl: 750-1750 6 Cyl: 900-1750	1750	8"	8"	
	20	256TC		1-7/8"					
	25	284TC							
	30	286TC							
	40	324TC							
	50	326TC							
	60	364/5TC							2-1/8"
	75								

*Compressor speed may be altered by changing motor pulley, consult engineering.

AMMONIA COMPRESSOR PUMP OUT UNITS

The following table consists of preconfigured compressor / motor combinations that cover a wide range of displacements for use as ammonia pump out units.

Catalog Number	Compressor Model	ODP Motor HP*	RPM	CFM	Compressor Pulley	Motor Pulley	System Item Number
AP1	W2TA.2	3	750	6	8"	4.0"	RBW2TA-0037LA
AP2	W2TA.2	5	1,225	9	8"	5.6"	RBW2TA-0057LA
AP3	W2TA.2	7.5	1,750	14	8"	8"	RBW2TA-0077LA
AP4	W2NA.2	10	1,750	20	8"	8"	RBW2NA-0107LA
AP5	W4TA.2	15	1,750	28	8"	8"	RBW4TA-0157LA
AP6	W4PA.2	15	1,750	33	8"	8"	RBW4PA-0157LA
AP7	W4NA.2	20	1,750	40	8"	8"	RBW4NA-0207LA
AP8	W4HA.2	25	1,750	52	8"	8"	RBW4HA-0257LA
AP9	W4GA.2	30	1,750	60	8"	8"	RBW4GA-0307LA
AP10	W6HA.2	40	1,750	79	8"	8"	RBW6HA-0407LA
AP11	W6GA.2	40	1,750	90	8"	8"	RBW6GA-0407LA
AP12	W6FA.2	50	1,750	108	8"	8"	RBW6FA-0507LA

**Horsepower sized for stated model, speed, and pressure equivalents to a SST of 45°F and SDT of 90°F

MOTOR DATA—ODP

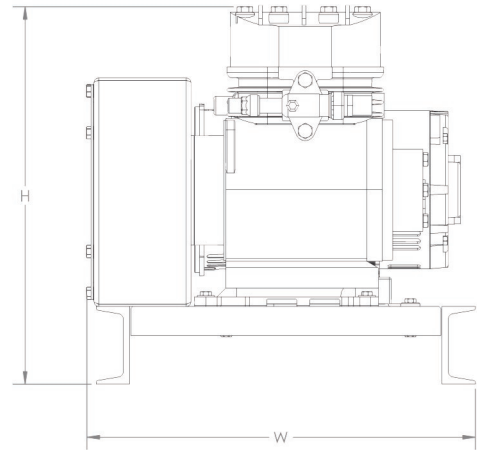
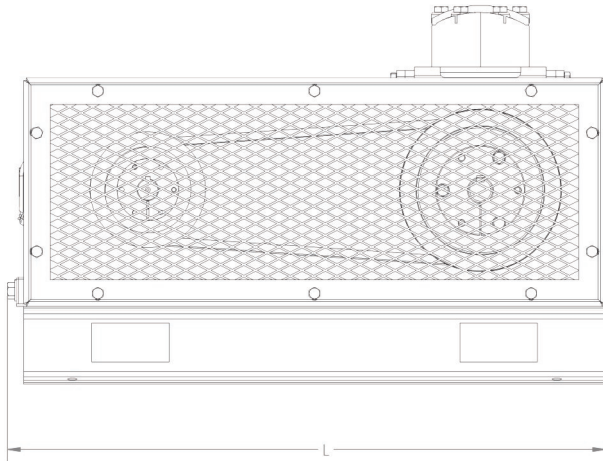
Compressor Model Series	HP	KW	NEMA Frame Size	Rated Speed	Service Factor	FL Amps (A)	Locked Rotor Current (I _L /I _n)	FL Efficiency (%)	Full Load Torque (ft.lb)	Degree of Protection
2T.2 ... 2N.2	3	2.2	182TC	1765	1.15	3.9	8.4	89.5	8.8	IP21
	5	3.7	184TC	1760	1.15	6.3	7.2	89.5	14.8	IP21
	7.5	5.5	213/5TC	1770	1.15	9.1	7.2	90.2	22.0	IP21
	10	7.5		1770	1.15	12.4	7.0	91.7	29.4	IP21
4T.2 ... 4N.2	7.5	5.5	213/5TC	1770	1.15	9.1	7.2	90.2	22.0	IP21
	10	7.5		1770	1.15	12.4	7.0	91.7	29.4	IP21
	15	11	254TC	1775	1.15	18.3	6.7	93.0	44.0	IP23
	20	15	256TC	1770	1.15	24.7	6.3	93.0	58.7	IP23
4H.2 ... 6F..2	15	11	254TC	1775	1.15	18.3	6.7	93.0	44.0	IP23
	20	15	256TC	1770	1.15	24.7	6.3	93.0	58.7	IP23
	25	18.5	284TC	1770	1.15	29.9	6.7	93.6	73.4	IP23
	30	22	286TC	1770	1.15	35.4	6.7	94.1	88.1	IP23
	40	30	324TC	1775	1.15	48.2	6.2	94.1	117.0	IP23
	50	37	326TC	1775	1.15	61.4	6.3	94.5	146.0	IP23
	60	45	364/5TC	1780	1.15	69.9	6.7	95.0	175.0	IP23
	75	55		1780	1.15	85.5	6.7	95.0	219.0	IP23

MOTOR DATA—TEFC

Compressor Model Series	HP	KW	NEMA Frame Size	Rated Speed	Service Factor	FL Amps (A)	Locked Rotor Current (I _L /I _n)	FL Efficiency (%)	Full Load Torque (ft.lb)	Degree of Protection
2T.2 ... 2N.2	3	2.2	182TC	1760	1.25	3.9	8.1	89.5	8.8	IP55
	5	3.7	184TC	1755	1.25	6.5	7.1	89.5	14.8	IP55
	7.5	5.5	213TC	1765	1.25	9.0	7.1	91.7	22.0	IP55
	10	7.5	215TC	1760	1.25	12.4	6.4	91.7	29.4	IP55
4T.2 ... 4N.2	7.5	5.5	213TC	1765	1.25	9.0	7.1	91.7	22.0	IP55
	10	7.5	215TC	1760	1.25	12.4	6.4	91.7	29.4	IP55
	15	11	254TC	1765	1.25	18.0	6.4	92.4	44.0	IP55
	20	15	256TC	1765	1.25	24.1	6.5	93.0	58.7	IP55
4H.2 ... 6F..2	15	11	254TC	1765	1.25	18.0	6.4	92.4	44.0	IP55
	20	15	256TC	1765	1.25	24.1	6.5	93.0	58.7	IP55
	25	18.5	284TC	1775	1.25	29.5	6.2	93.6	73.4	IP55
	30	22	286TC	1765	1.25	35.1	6.1	93.6	88.1	IP55
	40	30	324TC	1775	1.25	48.2	6.1	94.1	117.0	IP55
	50	37	326TC	1775	1.25	59.2	6.2	94.5	146.0	IP55
	60	45	364/5TC	1775	1.25	68.3	6.6	95.0	175.0	IP55
	75	55		1775	1.25	84.1	6.4	95.4	219.0	IP55

DIMENSIONAL DRAWINGS

2T.2, 2T2Y, 2T2Q, W2TA, 2N.2, 2N2Y, 2N2Q, W2NA




DIMENSIONAL DRAWINGS

Model Number	Dimensions (in)				
	L	W	H	WT (lb)	
RB(W)2(N-T)XX-003(6-9)XX	31	20	21	410	
RB(W)2(N-T)XX-005(6-9)XX				480	
RB(W)2(N-T)XX-007(6-9)XX				450	
RB(W)2(N-T)XX-010(6-9)XX				650	
RB(W)2(N-T)XX-003(1-5)XX				500	
RB(W)2(N-T)XX-005(1-5)XX				540	
RB(W)2(N-T)XX-007(1-5)XX	33	22		580	
RB(W)2(N-T)XX-010(1-5)XX		24		600	
RB(W)4(N-T)XX-007(1-5)XX		22		550	
RB(W)4(N-T)XX-010(1-5)XX	35	23		23	650
RB(W)4(N-T)XX-007(6-9)XX					740
RB(W)4(N-T)XX-010(6-9)XX					650
RB(W)4(N-T)XX-015(6-9)XX			775		
RB(W)4(N-T)XX-015(1-5)XX			750		
RB(W)4(N-T)XX-020(6-9)XX			875		
RB(W)4(N-T)XX-020(1-5)XX	37	28	780		
RB(W)4(G-H)XX-015(6-9)XX			915		
RB(W)4(G-H)XX-015(1-5)XX			815		
RB(W)4(G-H)XX-020(6-9)XX			875		
RB(W)4(G-H)XX-020(1-5)XX			875		
RB(W)4(G-H)XX-025(6-9)XX			815		
RB(W)4(G-H)XX-025(1-5)XX	41	32	875		
RB(W)4(G-H)XX-030(6-9)XX			875		
RB(W)4(G-H)XX-030(1-5)XX			825		

DIMENSIONAL DRAWINGS

Model Number	Dimensions (in)						
	L	W	H	WT (lb)			
RB(W)4(G-H)XX-040(6-9)XX	43	32	25	1005			
RB(W)4(G-H)XX-040(1-5)XX	49	36	26	1055			
RB(W)4(G-H)XX-050(6-9)XX	44	34	24	1050			
RB(W)4(G-H)XX-050(1-5)XX	43	36	25	1100			
RB(W)4(G-H)XX-060(6-9)XX RB(W)4(G-H)XX-075(6-9)XX	49	37	28	1340			
RB(W)4(G-H)XX-060(1-5)XX RB(W)4(G-H)XX-075(1-5)XX	48	40	24	1525			
RB(W)6(G-H)XX-015(6-9)XX	40	31	24	563			
RB(W)6(G-H)XX-015(1-5)XX				660			
RB(W)6(G-H)XX-020(6-9)XX				575			
RB(W)6(G-H)XX-020(1-5)XX				690			
RB(W)6(G-H)XX-025(6-9)XX				700			
RB(W)6(G-H)XX-025(1-5)XX				775			
RB(W)6(G-H)XX-030(6-9)XX				770			
RB(W)6(G-H)XX-030(1-5)XX				750			
RB(W)6(G-H)XX-040(6-9)XX	43	32	26	975			
RB(W)6(G-H)XX-040(1-5)XX				965			
RB(W)6(G-H)XX-050(6-9)XX				955			
RB(W)6(G-H)XX-050(1-5)XX				1005			
RB(W)6(G-H)XX-060(6-9)XX RB(W)6(G-H)XX-075(6-9)XX				50	36	28	1275
RB(W)6(G-H)XX-060(1-5)XX RB(W)6(G-H)XX-075(1-5)XX				50	40	26	1430
RB(W)6FXX-015(6-9)XX				41	31	24	850
RB(W)6FXX-015(1-5)XX							940
RB(W)6FXX-020(6-9)XX	850						
RB(W)6FXX-020(1-5)XX	970						
RB(W)6FXX-025(6-9)XX	1000						
RB(W)6FXX-025(1-5)XX	1058						
RB(W)6FXX-030(6-9)XX	45	32	26				1015
RB(W)6FXX-030(1-5)XX							1200
RB(W)6FXX-040(6-9)XX	47	36	26	1230			
RB(W)6FXX-040(1-5)XX				1220			
RB(W)6FXX-050(6-9)XX				1270			
RB(W)6FXX-050(1-5)XX				1540			
RB(W)6FXX-060(6-9)XX RB(W)6FXX-075(6-9)XX				50	40	26	1700
RB(W)6FXX-060(1-5)XX RB(W)6FXX-075(1-5)XX				50	40	26	1700



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