

## **COMPRESSOR DATA SHEET**

## In Accordance With Federal Uniform Test Method for Certain Lubricated Air Compressors

## **Rotary Compressor: Variable Frequency Drive**

27.7       140.5       19.72         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       40.00       40.00       %         10       Isentropic Efficiency       66.40       %         11       50.00       30.00       30.00       15.00       175.00       20.00         10.00       25.00       50.00       75.00       100.00       175.00       20.00       25.00       25.00         10.00       25.00       50.00       75.00       100.00       175.00       20.00       25.00       25.00         10.00       25.00       50.00       75.00       100.00       175.00       20.00       25.00       25.00         Note:       Graphic only a stimal representation of the data in Section 8       Note: Y-Axis Scale, 010 25.4% Wit00dm increments if accessary above 35       X-Axis Scale, 010 25.4% wore maximum capacity         rmodels that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator nsult CAGI website for a list of participants in the third party verification program:       www.cagi.org	1					FOR COMPRESSE	~					
2       Air-cooled       Water-cooled       Type:       Screw         3*       Full Load Operating Pressure <sup>b</sup> 100       psig <sup>b</sup> 1         3*       Full Load Operating Pressure <sup>b</sup> 100       psig <sup>b</sup> 1         5       Drive Motor Nominal Rating       50       hp       1         6       Fan Motor Nominal Efficiency       89.5       percent         7       Fan Motor Nominal Efficiency       87.5       percent         8*       40.0.3       107.9       20.36         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       40.7       23.0       50.0       10.0         11       50.0       50.00       75.0       20.00       25.00         11       50.0       50.00       75.0       20.00       25.00       25.00         11       50.0       50.00       75.00       20.00       25.00       25.00       25.00         11       50.0       50.00       75.00       20.00       25.00 <th>_</th> <th>Manufact</th> <th>urer:</th> <th>FS Cu</th> <th>rtis</th> <th></th> <th></th> <th></th>	_	Manufact	urer:	FS Cu	rtis							
# of Stages:       1         3*       Full Load Operating Pressure       100       psig       b         4       Drive Motor Nominal Rating       50       hp       psig       b         5       Drive Motor Nominal Efficiency       89.5       percent         6       Fan Motor Nominal Efficiency       87.5       percent         7       Fan Motor Nominal Efficiency       87.5       percent         8*       40.3       197.9       20.36         8*       40.3       197.9       20.36         9*       7.7       140.5       19.72         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       96         10       Isentropic Efficiency       66.40       96         10       Isentropic Efficiency       KW of Graph endy a visal representation of the data in Sectors 9       New YAM Sectors 9         10       Isentropic Efficiency       66.40       96       New YAM Sectors 9         10       Isentropic Efficiency       Sectors 100 9.5.9.9000       New YAM Sectors 9       New YAM Sectore		Model Nu	umber:	NxV37	-100		Date:	SEPTEMBER, 2015				
3*       Full Load Operating Pressure <sup>b</sup> 100       psig <sup>b</sup> 4       Drive Motor Nominal Rating       50       hp         5       Drive Motor Nominal Efficiency       89.5       percent         6       Fan Motor Nominal Efficiency       87.5       percent         7       Fan Motor Nominal Efficiency       87.5       percent         8*       40.3       197.9       20.36         40.3       197.9       20.36       197.2         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>6, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       90       Total Package Input Power at Zero Flow <sup>6, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %       %         10       Isentropic Efficiency       80.07.70       10.00       15.00       10.00       25.00       25.00         10.00       25.00       50.07       70.00       10.00       15.00       10.00       25.00       25.00         11       90       10.00       25.00       50.00       75.	2	X A	Air-cooled		Water-cooled		Type:	Screw				
4       Drive Motor Nominal Rating       50       hp         5       Drive Motor Nominal Rating (if applicable)       1.5       pp         6       Fan Motor Nominal Efficiency       87.5       percent         7       Fan Motor Nominal Efficiency       87.5       percent         8       Input Power (kW)       Capacity (acfm) <sup>a,d</sup> Specific Power (kW/100 acfm) <sup>d</sup> 46.7       227       20.57         8*       40.3       197.9       20.36         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       90       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %       %         11       90       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW       KW         10       Isentropic Efficiency       25.0       50.0       75.0       100.0       15.0       10.0         10.00       25.0       50.0       75.0       100.0       15.0       10.0       <	2.4			D	b	100	# of Stages:					
5       Drive Motor Nominal Efficiency       89.5       percent         6       Fan Motor Nominal Efficiency       87.5       percent         7       Fan Motor Nominal Efficiency       87.5       percent         8#       Input Power (kW)       Capacity (acfm) <sup>a,d</sup> (kW/100 acfm) <sup>d</sup> 46.7       227       20.57         8#       40.3       197.9       20.36         21.3       109.8       19.40         11.3       51.8       21.81         9#       Total Package Input Power at Zero Flow <sup>c,d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       90.00       25.00       25.00       25.00         10.00       20.00       50.00       70.00       10.00       15.00         11.00       90.00       25.00       25.00       25.00       25.00       25.00         11.00       90.00       15.00       10.00       15.00       20.00       25.00       25.00         12.00       90.00       25.00       70.00       10.00       15.00       10.00       15.00       20.00       25.00       25.00         13.00       25.0       5.00	-											
6       Fan Motor Nominal Rating (if applicable)       1.5       hp         7       Fan Motor Nominal Efficiency       87.5       percent         7       Input Power (kW)       Capacity (acfm) <sup>0,d</sup> Specific Power (kW/100 acfm) <sup>d</sup> 46.7       227       20.57         8*       40.3       197.9       20.36         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>C</sup> ( <sup>d</sup> )       0.0       kW         10       Isentropic Efficiency       66.40       %         11       9%       Total Package Input Power at Zero Flow <sup>C</sup> ( <sup>d</sup> )       0.0       kW         10       Isentropic Efficiency       66.40       %       9         11       1000       2000       2500       5000       7500       100.00       175.00       20.00       25.00       20.00         10       Isentropic Efficiency       66.40       %       175.00       20.00       25.00       20.00         10       Isentropic Efficiency       15.00       175.00       20.00       25.00       20.00         1000       25.00       50.00       75.00       100.00       175.00					-			*				
7       Fan Motor Nominal Efficiency       87.5       percent         Input Power (kW)       Capacity (acfm) <sup>3,d</sup> Specific Power (kW/100 acfm) <sup>d</sup> 46.7       227       20.57         8*       40.3       197.9       20.36         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       90,00       50,00       75,00       100,00       175,00       200,00       25,00         10       Isentropic Efficiency       66.40       %       10       State Stat	-							<b>.</b>				
Input Power (kW)         Capacity (acfm) <sup>a.d</sup> Specific Power (kW/100 acfm) <sup>d.d</sup> 46.7         227         20.57           8*         40.3         197.9         20.36           27.7         140.5         19.72           21.3         109.8         19.40           11.3         51.8         21.81           9*         Total Package Input Power at Zero Flow <sup>c. d</sup> 0.0         kW           10         Isentropic Efficiency         66.40         %           11 25.0 25.	-							ľ				
Input Power (kW)       Capacity (acfm) <sup>d.d.</sup> (kW/100 acfm) <sup>d.d.</sup> 46.7       227       20.57         8*       40.3       197.9       20.36         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>c.d.</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       90       Total Package Input Power at Zero Flow <sup>c.d.</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %       %         11       90       Total Package Input Power at Zero Flow <sup>c.d.</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %       %         11       90       Total Package Input Power at Zero Flow <sup>c.d.</sup> 0.0       kW         11       90       South State S	/				ncy							
8*     46.7     227     20.57       8*     40.3     197.9     20.36       21.3     109.8     19.72       21.3     109.8     19.40       11.3     51.8     21.81       9*     Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0     kW       10     Isentropic Efficiency     66.40     %       11     90     Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0     kW       11     90     Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0     kW       11     90     Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0     kW       11     90     Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0     kW       11     90     Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0     kW       11     90     1000     15.00     15.00     15.00     25.00       11     90     1000     125.00     15.00     15.00     25.00       11     90     1000     125.00     15.00     15.00     25.00       11     90     1000     125.00     15.00     15.00     25.00       11     90     1000     125.00     15.00     15.00     25.00       11     90		Input Power (kW)			Capacity (acfm) <sup>a,d</sup>	a d						
27.7       140.5       19.72         21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>c, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11       90, 000       10.00       10.00       10.00       10.00         11       90, 000       10.00       10.00       10.00       10.00       10.00       10.00         11.0       10.00       25.00       50.00       75.00       100.00       125.00       100.00       25.00       20.00         11.0       10.00       25.00       50.00       75.00       100.00       125.00       100.00       25.00       20.00         11.0       10.00       25.00       50.00       75.00       100.00       125.00       100.00       25.00       20.00         10.00       25.00       50.00       75.00       100.00       125.00       100.00       25.00       20.00       25.00       20.00       25.00       20.00       25.00       20.00       25.00       20.00       25.00       25.00       25.00       25.00       25.00       25.00       25.00		46.7				227						
21.3       109.8       19.40         11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow <sup>C, d</sup> 0.0       kW         10       Isentropic Efficiency       66.40       %         11               40.00             55.0             50.0	8*	40.3				197.9		20.36				
11.3       51.8       21.81         9*       Total Package Input Power at Zero Flow       66.40       kW         10       Isentropic Efficiency       66.40       %         11       40.00       %       %       %         11       40.00       %       %       %         11       40.00       %       %       %         11       10       10       10       10       %       %         11       10       10       10       10       10       %       %         11       10       10       10       10       10       10       10       10       %       %         11       10       1				27.7		140.5		19.72				
9*     Total Package Input Power at Zero Flow     c. d     0.0     kW       10     Isentropic Efficiency     66.40     %       11     40.0     40.0     %       11     40.0     30.0     30.0     %       11     40.0     55.0     %     %       11     40.0     55.0     %     %       11     10.0     25.00     50.0     75.00     100.00     125.00     175.00     20.00       10.0     25.00     50.00     75.00     100.00     125.00     175.00     20.00     25.00       10.0     25.00     50.00     75.00     100.00     125.00     175.00     20.00     225.00     250.00       10.00     25.00     50.00     75.00     100.00     125.00     175.00     200.00     225.00     250.00       11     10.00     25.00     50.00     75.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00     125.00     100.00		21.3				109.8		19.40				
9*     Total Package Input Power at Zero Flow     0.0     KW       10     Isentropic Efficiency     66.40     %       11     40.00     %     %       11     40.00     %     %       11     100     10.00     15.00     %       11     100     10.00     15.00     15.00     175.00     20.00       10.00     25.00     50.00     75.00     100.00     125.00     150.00     175.00     20.00       10.00     25.00     50.00     75.00     100.00     125.00     150.00     175.00     20.00     25.00       Capacity (ACPM)       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8       Note: Graph is only a visual representation of the data in Section 8<				11.3				21.81				
11       0.00000000000000000000000000000000000	9*	Total Pac	kage Input	Power	at Zero Flow	0.0		kW				
11 <ul> <li></li></ul>	10	Isentropic	Efficienc	у		66.40		%				
Image: transmission of the section of the second of the section of the section of the section of the section o		Specific Power (kW/100 ACFM	Specific Power (kWV100 ACFM 52'00 52'00									
0.00       25.00       50.00       75.00       100.00       125.00       150.00       175.00       200.00       225.00       250.00         Capacity (ACFM)         Note: Graph is only a visual representation of the data in Section 8         Note: Graph is only a visual representation of the data in Section 8         Note: Y-Axis Scale, 10 to 35, + 5kW/100acfm increments if necessary above 35         X-Axis Scale, 0 to 25% over maximum capacity         r models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator nsult CAGI website for a list of participants in the third party verification program: www.cagi.org         OTES:         a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E; ACFM is actual cubic feet per minute at inlet conditions.         b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sl c. No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%, manufacturer may state "not significant" or "0" on the test report.         OTE: The terms "power" and "energy" are synonymous for purposes of this document.         Volume Flow Rate         Volume Flow Rate         Volume Flow Rate         Volume Flow Rate <td <="" colspan="4" td=""><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td>	<td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				11							
Capacity (ACFM)           Note: Graph is only a visual representation of the data in Section 8 Note: Y-Axis Scale, 0 to 35, + 5kW/100acfm increments if necessary above 35 X-Axis Scale, 0 to 25% over maximum capacity           r models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator nsult CAGI website for a list of participants in the third party verification program: www.cagi.org           OTES:         a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E; ACFM is actual cubic feet per minute at inlet conditions.           b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sl c. No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%, manufacturer may state "not significant" or "0" on the test report.           d. Tolerance is specified in ISO 1217, Annex E, as shown in table below: NOTE: The terms "power" and "energy" are synonymous for purposes of this document.           Volume Flow Rate at specified conditions         Volume Flow Rate Volume Flow Rate         Specific Energy Consumption         Zero Flow Power	11		15.00									
Note:         Graph is only a visual representation of the data in Section 8 Note: Y-Axis Scale, 10 to 35, + 5kW/100acfm increments if necessary above 35 X-Axis Scale, 0 to 25% over maximum capacity           r models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator nsult CAGI website for a list of participants in the third party verification program: www.cagi.org           OTES:         a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E; ACFM is actual cubic feet per minute at inlet conditions.           b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sl c. No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%, manufacturer may state "not significant" or "0" on the test report.           d. Tolerance is specified in ISO 1217, Annex E, as shown in table below: NOTE: The terms "power" and "energy" are synonymous for purposes of this document.           Volume Flow Rate         Volume Flow Rate           volume Flow Rate         Volume Flow Rate	11		10.00	).00	- - - 500 5000 750	0 100.00 125.00 150.00	175.00 200.00	) 225.00 250.00				
Image: Second State State       Specific Energy       Zero Flow         Volume Flow Rate       Volume Flow Rate       Specific Energy       Zero Flow         Power       Volume Flow Rate       Volume Flow Rate       Specific Energy       Zero Flow	11		10.00	0.00 2	5.00 50.00 75.0		175.00 200.00	) 225.00 250.00				
OTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E; ACFM is actual cubic feet per minute at inlet conditions.         b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sl c. No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%, manufacturer may state "not significant" or "0" on the test report.         d. Tolerance is specified in ISO 1217, Annex E, as shown in table below: NOTE: The terms "power" and "energy" are synonymous for purposes of this document.         Volume Flow Rate       Specific Energy         Volume Flow Rate       Volume Flow Rate         Volume Flow Rate       Volume Flow Rate	11		10.00		Note: Graph is only a ote: Y-Axis Scale, 10 to 3	Capacity (ACFM) visual representation of the data i 5, + 5kW/100acfm increments if nec	n Section 8 cessary above 35	0 225.00 250.00				
ACFM is actual cubic feet per minute at inlet conditions. b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sl c. No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%, manufacturer may state "not significant" or "0" on the test report. d. Tolerance is specified in ISO 1217, Annex E, as shown in table below: NOTE: The terms "power" and "energy" are synonymous for purposes of this document. Volume Flow Rate at specified conditions Volume Flow Rate Volume	or models		10.00 ed in the CA	N GI Perfo	Note: Graph is only a ote: Y-Axis Scale, 10 to 3 X-Axis Sca rmance Verification	Capacity (ACFM) visual representation of the data i 5, + 5kW/100acfm increments if nec le, 0 to 25% over maximum capacity Program, these items are v	n Section 8 ressary above 35 erified by the thi	ird party administrator				
at specified conditions Volume Flow Rate Consumption Power	pr models		10.00 ed in the CA	N GI Perfo	Note: Graph is only a ote: Y-Axis Scale, 10 to 3 X-Axis Sca rmance Verification	Capacity (ACFM) visual representation of the data i 5, + 5kW/100acfm increments if nec le, 0 to 25% over maximum capacity Program, these items are v	n Section 8 ressary above 35 erified by the thi	ird party administrator				
at specified conditions Volume Flow Rate Consumption Power	or models onsult CA NOTES:	GI website fo a. Mea ACF b. The c. No I man d. Tole	ed in the CA or a list of pa usured at the d "M is actual c operating pre Load Power. Lufacturer may erance is spec	N GI Perfo urticipan ischarge ubic feet ssure at v In accord / state "n ified in IS	Note: Graph is only a ote: Y-Axis Scale, 10 to 3 X-Axis Sca rmance Verification ts in the third party terminal point of the per minute at inlet co which the Capacity (It ance with ISO 1217, ot significant" or "0" SO 1217, Annex E, as	Capacity (ACFM) visual representation of the data i 5, + 5kW/100acfm increments if nec le, 0 to 25% over maximum capacity Program, these items are v verification program: compressor package in accord nditions. em 8) and Electrical Consump Annex E, if measurement of n on the test report. shown in table below:	n Section 8 ressary above 35 erified by the thi www.cagi.org ance with ISO 12 otion (Item 8) wer o load power equa	ird party administrator 17, Annex E; e measured for this data she				
$\underline{\text{m}^3 / \text{min}}$ $\underline{\text{ft}^3 / \text{min}}$ % %	or models onsult CA NOTES:	GI website fo a. Mea ACF b. The c. No I man d. Tole NOT	10.00 ed in the CA or a list of pa sured at the d operating pre Load Power. ufacturer may erance is spec IFE: The term	N GI Perfo urticipan ischarge ubic feet ssure at v In accord / state "n ified in IS	Note: Graph is only a ote: Y-Axis Scale, 10 to 3 X-Axis Sca rmance Verification ts in the third party terminal point of the per minute at inlet co which the Capacity (It ance with ISO 1217, ot significant" or "0" SO 1217, Annex E, as	Capacity (ACFM) visual representation of the data i 15, + 5kW/100acfm increments if nec le, 0 to 25% over maximum capacity a Program, these items are v verification program: compressor package in accord nditions. em 8) and Electrical Consump Annex E, if measurement of n on the test report. shown in table below: nonymous for purposes of this	n Section 8 erified by the thi www.cagi.org ance with ISO 12 btion (Item 8) wer o load power equa- document.	ird party administrator 17, Annex E; e measured for this data she				
Below Delaw 17.6	or models	GI website fo a. Mea ACF b. The c. No I manı d. Tole NOT	10.00 ed in the CA or a list of pa sured at the d FM is actual c operating particular Load Power. ufacturer may grance is spec FE: The term	N GI Perfo Irticipan ischarge ubic feet ssure at v In accord state "n ified in IS s "power	Note: Graph is only a ote: Y-Axis Scale, 10 to 3 X-Axis Sca rmance Verification ts in the third party terminal point of the per minute at inlet co which the Capacity (It ance with ISO 1217, ot significant" or "0" SO 1217, Annex E, as " and "energy" are sy	Capacity (ACFM) visual representation of the data i 15, + 5kW/100acfm increments if nec le, 0 to 25% over maximum capacity reprogram, these items are v verification program: compressor package in accord nditions. em 8) and Electrical Consump Annex E, if measurement of n on the test report. shown in table below: nonymous for purposes of this Specific Energy	n Section 8 erified by the thi www.cagi.org ance with ISO 12 btion (Item 8) wer o load power equa document.	ird party administrator 17, Annex E; e measured for this data she				



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		ume Flow Rate cified conditions	Volume Flow Rate	Specific Energy Consumption	Zero Flow Power
	$\underline{m}^3 / \underline{min}$	<u>ft<sup>3</sup> / min</u>	%	%	%
	Below 0.5	Below 17.6	+/- 7	+/- 8	
	0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	+/- 10%
	1.5 to 15	53 to 529.7	+/- 5	+/- 6	
ROT 031.1	Above 15	Above 529.7	+/- 4	+/- 5	

12/19 Rev 3 This form was developed by the Compressed Air and Gas Institute for the use of its members participating in the PVP. CAGI has not independently verified the reported data.