

ROT 030

10/11 R8

## **COMPRESSOR DATA SHEET**

## **Rotary Compressor: Fixed Speed**

Volume Flow Rate at specified conditionsVolume Flow RateSpecific Energy ConsumptionNo Lo Flow $\frac{m^3 / min}{Below 0.5}$ $\frac{ft3 / min}{Below 15}$ %%		MODE	L DATA - FOR CO	MPRESSED AIR		
2       x       Air-cooled       Water-cooled       Type:       Screw         x       Oil-injected       Oil-free       # of Stages:       1         Rated Capacity at Full Load Operating       acim <sup>a,e</sup> 1         4       Full Load Operating Pressure <sup>b</sup> 100       psig <sup>b</sup> 5       Maximum Full Flow Operating Pressure <sup>c</sup> 107       psig <sup>c</sup> 6       Drive Motor Nominal Rating       270       hp         7       Drive Motor Nominal Rating       270       hp         7       Drive Motor Nominal Rating (if applicable)       12       hp         9       Fan Motor Nominal Efficiency       86.7       percent         10*       Total Package Input Power at Zero Flow <sup>c</sup> 56       kW <sup>c</sup> 11       Total Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated Capacity werification program. these items are verified by the third party administrator       Consult CAGI westiefor a list of participants in the third party verification program.          www.cagi org <th>1</th> <th>Manufacturer:</th> <th>Chicago Pneumatic</th> <th></th> <th></th> <th>]</th>	1	Manufacturer:	Chicago Pneumatic			]
Image: An ecoded       Image: Coded       Cole of the problem of the coded       Cole of the problem of the code of		Model Number:	CPF 270	Date:	May-15	1
Rated Capacity at Full Load Operating       1241       acfm <sup>a,e</sup> 3*       Pressure <sup>a, e</sup> 1241       acfm <sup>a,e</sup> 4       Full Load Operating Pressure <sup>b</sup> 100       psig <sup>c</sup> 5       Maximum Full Flow Operating Pressure <sup>c</sup> 107       psig <sup>c</sup> 6       Drive Motor Nominal Rating       270       hp         7       Drive Motor Nominal Efficiency       96.2       percent         8       Fan Motor Nominal Efficiency       96.2       percent         9       Fan Motor Nominal Efficiency       86.7       percent         10*       Total Package Input Power at Zero Flow <sup>e</sup> 56       kW <sup>e</sup> 11       Total Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> Capacity and Full Load Operating Pressure <sup>e</sup> 18.4       kW/100 cfm <sup>e</sup> *Por models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator         Consult CAGI websitefor a list of participants in the third party verification program:       Www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C, ACPH is actall cubic feet per minute at inlet condit	2	<b>x</b> Air-cooled	Water-cooled	Type:	Screw	
$3^*$ Pressure $acfm^{A,c}$ 4       Full Load Operating Pressure       b       100       psig <sup>b</sup> 5       Maximum Full Flow Operating Pressure       c       107       psig <sup>c</sup> 6       Drive Motor Nominal Rating       270       hp         7       Drive Motor Nominal Efficiency       96.2       percent         8       Fan Motor Nominal Efficiency       96.7       percent         9       Fan Motor Nominal Efficiency       86.7       percent         10*       Total Package Input Power at Zero Flow       56       kW <sup>c</sup> 11       Total Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> -2apacity and Full Load Operating Pressure <sup>d</sup> 18.4       kW/100 cfm <sup>e</sup> -2apacity and Full Load Operating Pressure <sup>d</sup> 18.4       kW/100 cfm <sup>e</sup> -12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> -2apacity and Full Load Operating Pressure <sup>d</sup> 18.4       kW/100 cfm <sup>e</sup> -2apacity and Full Load Operating Pressure at a the discharge terminal point of the compressor package in accordance with SO 1217, Annex C, ACFM is actual cubic feet per minnet at indet conditions.		x Oil-injected	Oil-free	# of Stages:	1	1
4Full Load Operating Pressure100psig5Maximum Full Flow Operating Pressure107psig6Drive Motor Nominal Rating270hp7Drive Motor Nominal Efficiency96.2percent8Fan Motor Nominal Efficiency96.7percent9Fan Motor Nominal Efficiency86.7percent10*Total Package Input Power at Zero Flow56kW <sup>e</sup> 11Total Package Input Power at Rated Capacity228.2kW <sup>d</sup> 12*Specific Package Input Power at Rated Capacity228.2kW <sup>d</sup> 12*Specific Package Input Power at Rated18.4kW/100 cfm <sup>e</sup> *for models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program:WWW.cagi.orgNOTES:NMeasured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C. ACTM is actual cubic feet per minute at intel conditions.D. The operating pressure at which the Capacity (tem 3) and Electrical Commonyonic (tem 11) were measured for this data sheet.MemberMeasured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C. ACTM is actual cubic feet per minute at intel conditions.Determine pressure at which the Capacity (tem 3) and Electrical Comsumption (tem 11) were measured for this data sheet.MenteringMeasured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C, as shown in table below:Menteri			Load Operating			
5       Maximum Full Flow Operating Pressure       107       psig <sup>c</sup> 6       Drive Motor Nominal Rating       270       hp         7       Drive Motor Nominal Efficiency       96.2       percent         8       Fan Motor Nominal Rating (if applicable)       12       hp         9       Fan Motor Nominal Efficiency       86.7       percent         10*       Total Package Input Power at Zero Flow       56       kW <sup>c</sup> 11       Total Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> 12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> 12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> Consult CAGI websitefor a list of participants in the third party verification program:       www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C, ACFM is actual cubic feet per minute at infet conditions.         b. The operating pressure at which the Capacity (Item 3) and Electrical Consumption (Item 11) were measured for this data sheet.       10ad package input power at other than reported operating points will vary with control strategy.         c. Toterance is specified in ISO 1217, Annex C, a shown	3*	Pressure <sup>a, e</sup>		1241	acfm <sup>a,e</sup>	
6       Drive Motor Nominal Rating       270       hp         7       Drive Motor Nominal Efficiency       96.2       percent         8       Fan Motor Nominal Rating (if applicable)       12       hp         9       Fan Motor Nominal Efficiency       86.7       percent         10*       Total Package Input Power at Zero Flow <sup>e</sup> 56       kW <sup>e</sup> 11       Total Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> Consult CAGI websitefor a list of participants in the third party verification Program, these items are verified by the third party administrator         Consult CAGI websitefor a list of participants in the third party verification or program.       www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.         b. The operating pressure at which the Capacity (tem 3) and Electrical Consumption (tem 11) were measured for this data sheet.         c. Maximum pressure attainable be for capacity control begins. May require additional power.         d. Total package input power at other than reported operating points will vary with control strategy.	4	Full Load Operating Pro	essure <sup>b</sup>	100	psig <sup>b</sup>	
7       Drive Motor Nominal Efficiency       96.2       percent         8       Fan Motor Nominal Rating (if applicable)       12       hp         9       Fan Motor Nominal Efficiency       86.7       percent         10*       Total Package Input Power at Zero Flow <sup>e</sup> 56       kW <sup>e</sup> 11       Total Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> Capacity and Full Load Operating Pressure <sup>d</sup> 18.4       kW/100 cfm <sup>e</sup> *For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program:       WWw.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.       b. The operating pressure at tainable before capacity control begins. May require additional power.         • Total package input power at other than reported operating points will vary with control strategy.       • Total package input power at other than reported operating points. May require additional power.         • Total package input power at other than reported operating points will vary with control strategy.       • Total package input power at other than reported operating pressure atatinable befow:	5	Maximum Full Flow Op	perating Pressure <sup>c</sup>	107	psig <sup>c</sup>	
8       Fan Motor Nominal Rating (if applicable)       12       hp         9       Fan Motor Nominal Efficiency       86.7       percent         10#       Total Package Input Power at Zero Flow <sup>e</sup> 56       kW <sup>e</sup> 11       Total Package Input Power at Rated Capacity       228.2       kW <sup>d</sup> 12#       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> 2#       Specific Package Input Power at Rated       18.4       kW/100 cfm <sup>e</sup> ^*For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program:       www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C, ACFM is actual cubic feet per minute at indet conditions.       b. The operating pressure attainable at full flow, usually the unload pressure setting for load/no load control or the maximum pressure attainable before capacity control begins. May require additional power.       c. Maximum pressure attainable at full flow, usually the unload pressure setting for load/no load control or the maximum pressure attainable before capacity control begins. May require additional power.       total package input power at other than reported operating points will vary with control strategy.         c. Total package input power at other than reported operating points will vary with control strategy.       total package input power at other	6	Drive Motor Nominal F	Rating	270	hp	
9       Fan Motor Nominal Efficiency       86.7       percent         10*       Total Package Input Power at Zero Flow <sup>e</sup> 56       kW <sup>e</sup> 11       Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup> 228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>e</sup> 18.4       kW/100 cfm <sup>e</sup> *For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program:       www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACPM is actual cubic feet per minute at inlet conditions.       b. The operating pressure at which the Capacity (Item 3) and Electrical Consumption (Item 11) were measured for this data sheet.         • Maximum pressure attainable before capacity control begins. May require additional power.       c. Maximum pressure attainable before capacity control begins. May require additional power.         • Total package input power at Oter than reported operating points will vary with control strategy.       e. Tolerance is specified onditions         Volume Flow Rate at specified conditions       Volume Flow Rate Consumption       Gon sumption         Media Mol.5       Below 0.5       Below 15       4/-7       4/-8         0.5 to 1.5       15 to 50	7	Drive Motor Nominal E	Efficiency	96.2	percent	
10*       Total Package Input Power at Zero Flow       56       kW <sup>e</sup> 11       Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup> 228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>e</sup> 18.4       kW/100 cfm <sup>e</sup> *For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program: www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.         b. The operating pressure at which the Capacity (Item 3) and Electrical Consumption (Item 11) were measured for this data sheet.         c. Maximum pressure attainable before capacity control begins. May require additional power.         d. Total package input power at other than reported operating points will vary with control strategy.         e. Tolerance is specified in ISO 1217, Annex C, as shown in table below:         Volume Flow Rate at specified conditions       Volume Flow Rate Consumption         Wolume Flow Rate at specified conditions       Volume Flow Rate Consumption       Specifie Energy No L Flow         Melow 15       4/-7       4/-7       4/-7         Volume Flow Rate Do to 1.5       15 to 50       4/-6       4/-7 <td>8</td> <td>Fan Motor Nominal Rat</td> <td>ting (if applicable)</td> <td>12</td> <td>hp</td> <td>1</td>	8	Fan Motor Nominal Rat	ting (if applicable)	12	hp	1
11       Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup> 228.2       kW <sup>d</sup> 12*       Specific Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>e</sup> 18.4       kW/100 cfm <sup>e</sup> 12*       Specific Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>e</sup> 18.4       kW/100 cfm <sup>e</sup> *For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program:       www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.       b. The operating pressure attainable at full flow, usually the unload pressure setting for load/no load control or the maximum pressure attainable before capacity control begins. May require additional power.         d. Total package input power at other than reported operating points will vary with control strategy.       c. Total package input power at other than reported operating points will vary with control strategy.         e. Totarance is specified onditions       Volume Flow Rate       Specific Energy Consumption       No La         Weber       Volume Flow Rate       Specific Energy Consumption       No La         Delow 0.5       Below 15       4/-7       4/-8         Using a fight min       %       %       %	9	Fan Motor Nominal Eff	iciency	86.7	percent	1
and Full Load Operating Pressured       12*         12*       Specific Package Input Power at Rated Capacity and Full Load Operating Pressure       18.4       kW/100 cfm <sup>e</sup> *For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program: www.cagi.org         NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.         b. The operating pressure at which the Capacity (Item 3) and Electrical Consumption (Item 11) were measured for this data sheet.         c. Maximum pressure attainable at full flow, usually the unload pressure setting for load/no load control or the maximum pressure attainable before capacity control begins. May require additional power.         d. Total package input power at other than reported operating points will vary with control strategy.         e. Tolarance is specified in ISO 1217, Annex C, as shown in table below:         Volume Flow Rate       Consumption         Momber       Volume Flow Rate       Consumption         0.5 to 1.5       15 to 50       4/-7         12.5 to 1.5       15 to 50       4/-6	10*	Total Package Input Po	wer at Zero Flow <sup>e</sup>	56	kW <sup>e</sup>	
12       12       13       14       14       14       14       14       14       14       14       14       14       14       16       14 <td< td=""><td>11</td><td>U U U</td><td></td><td>228.2</td><td><math>kW^d</math></td><td></td></td<>	11	U U U		228.2	$kW^d$	
*For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator Consult CAGI websitefor a list of participants in the third party verification program: <u>www.cagi.org</u> NOTES: Member M	12*			18.4	kW/100 cfm <sup>e</sup>	
NOTES:       a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.         Member       b. The operating pressure at which the Capacity (Item 3) and Electrical Consumption (Item 11) were measured for this data sheet.         c. Maximum pressure attainable at full flow, usually the unload pressure setting for load/no load control or the maximum pressure attainable before capacity control begins. May require additional power.         d. Total package input power at other than reported operating points will vary with control strategy.         e. Total package input power at other than reported operating points will vary with control strategy.         e. Total package input power at other than reported operating points will vary with control strategy.         e. Total package input power at other than reported operating points will vary with control strategy.         e. Total package input power at other than reported operating points will vary with control strategy.         e. Total package input power at other than reported operating points will vary with control strategy.         e. Total package input power at other than reported operating points will vary with control strategy.         e. Total package input power at the flow Rate         Volume Flow Rate       Consumption         Below 0.5       Below 15       +/-7         0.5 to 1.5       15 to 50       +/-6       +/-7         0.5 to 1.5       15 to 50       +/-6		els that are tested in the CAGI	Performance Verification P	-		nistrator.
Volume Flow Rate at specified conditionsVolume Flow RateSpecific Energy ConsumptionNo Lo Flow $\underline{m^3 / \min}$ $\underline{ft3 / \min}$ %%Below 0.5Below 15+/- 7+/- 80.5 to 1.515 to 50+/- 6+/- 71.5 to 1515 to 50+/- 6+/- 7	NOTES: Member	<ul> <li>a. Measured at the discha ISO 1217, Annex C; A</li> <li>b. The operating pressure for this data sheet.</li> <li>c. Maximum pressure atta maximum pressure atta</li> <li>d. Total package input point</li> <li>e. Tolerance is specified</li> </ul>	arge terminal point of the comp CFM is actual cubic feet per r at which the Capacity (Item 3 ainable at full flow, usually the ainable before capacity control ower at other than reported ope	pressor package in accordance ninute at inlet conditions. ) and Electrical Consumption a unload pressure setting for lo begins. May require addition rating points will vary with co	e with (Item 11) were measured pad/no load control or the nal power.	
at specified conditionsVolume Flow RateConsumptionFlow $\underline{\mathrm{m}^3 / \min}$ $\underline{\mathrm{ft3} / \min}$ %%Below 0.5Below 15+/- 7+/- 80.5 to 1.515 to 50+/- 6+/- 71.5 to 1515 to 50+/- 6+/- 7	ed Air & Gas Institute		ne Flow Rate		Specific Energy	No Loa
Below 0.5         Below 15         +/- 7         +/- 8           0.5 to 1.5         15 to 50         +/- 6         +/- 7         +/		at speci			Consumption	Flow I
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15 (0 50						. 1
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Above 15 Above 500 +/- 4 +/- 5			50 to 500			