

Unicla® 10 CYLINDER SWASH PLATE COMPRESSORS

ALL MODEL SERIES: 45cc - 610cc using **R404a** (HFC-404a)

General Handling and Operating Parameters

ITEM	RANGE IN USE	REMARKS																																																																																																																																																																																			
1. REVOLUTION	Ideal Operation: 800 ~ 3500 rpm																																																																																																																																																																																				
	Maximum Continuous: 6000 rpm ≤300cc Maximum Continuous: 4500 rpm >300cc	Not for all applications - refer Unicla fitting guidelines																																																																																																																																																																																			
	Momentary: 7000 rpm ≤300cc capacity Momentary: 5000 rpm >300cc capacity	≤ 3 seconds																																																																																																																																																																																			
2. INTENSITY TEST PRESSURE	10.58 MPa (108 kgf/cm ² G)	Maximum level - component damage occurs																																																																																																																																																																																			
3. DURABILITY TEST PRESSURE	5.29 MPa (54 kgf/cm ² G)	Prolonged high level - no damage to components																																																																																																																																																																																			
4. AIRTIGHT TEST PRESSURE	HP: 3.53 MPa (36 kgf/cm ² G)	No leakage in pressure range																																																																																																																																																																																			
	LP: 1.67 MPa (17 kgf/cm ² G)	No leakage in pressure range																																																																																																																																																																																			
5. COMPRESSOR OPERATION ENVELOPE																																																																																																																																																																																					
<table border="1"> <thead> <tr> <th colspan="2">Hp</th> <th>t</th> <th colspan="12"></th> </tr> <tr> <th>Kg/cm²</th> <th>MPa</th> <th>°C</th> <th colspan="12"></th> </tr> </thead> <tbody> <tr> <td>35.5</td> <td>3.48</td> <td>70</td> <td colspan="12"></td> </tr> <tr> <td>28.5</td> <td>2.79</td> <td>60</td> <td colspan="12"></td> </tr> <tr> <td>22.7</td> <td>2.22</td> <td>50</td> <td colspan="12"></td> </tr> <tr> <td>17.8</td> <td>1.74</td> <td>40</td> <td colspan="12"></td> </tr> <tr> <td>13.7</td> <td>1.34</td> <td>30</td> <td colspan="12"></td> </tr> <tr> <td>10.2</td> <td>1.0</td> <td>20</td> <td colspan="12"></td> </tr> <tr> <td>7.4</td> <td>0.72</td> <td>10</td> <td colspan="12"></td> </tr> <tr> <td>to</td> <td></td> <td>°C</td> <td>-35</td> <td>-30</td> <td>-25</td> <td>-20</td> <td>-15</td> <td>-10</td> <td>-5</td> <td>±0</td> <td>+5</td> <td>+10</td> <td colspan="2"></td> </tr> <tr> <td rowspan="2">Lp</td> <td>MPa</td> <td></td> <td>0.06</td> <td>0.1</td> <td>0.15</td> <td>0.2</td> <td>0.26</td> <td>0.33</td> <td>0.4</td> <td>0.051</td> <td>0.061</td> <td>0.72</td> <td colspan="2"></td> </tr> <tr> <td>Kg/cm²</td> <td></td> <td>0.65</td> <td>1.1</td> <td>1.5</td> <td>2.1</td> <td>2.7</td> <td>3.4</td> <td>4.1</td> <td>5.2</td> <td>6.2</td> <td>7.4</td> <td colspan="2"></td> </tr> </tbody> </table>			Hp		t													Kg/cm ²	MPa	°C													35.5	3.48	70													28.5	2.79	60													22.7	2.22	50													17.8	1.74	40													13.7	1.34	30													10.2	1.0	20													7.4	0.72	10													to		°C	-35	-30	-25	-20	-15	-10	-5	±0	+5	+10			Lp	MPa		0.06	0.1	0.15	0.2	0.26	0.33	0.4	0.051	0.061	0.72			Kg/cm ²		0.65	1.1	1.5	2.1	2.7	3.4	4.1	5.2	6.2	7.4		
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6. TEMPERATURE	Operating: 0 ~ 120°C																																																																																																																																																																																				
	Non - operating: -30 ~ 130 °C	In storage																																																																																																																																																																																			
7. DISCHARGE GAS TEMP	≤120°C																																																																																																																																																																																				
8. SUCTION GAS SUPERHEAT	5 ~ 25°C																																																																																																																																																																																				
9. CLUTCH VOLTAGE	DC 8 ~ 16V	DC 12V Applications																																																																																																																																																																																			
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10. CLUTCH WIRE -COIL TEMP	≤100°C																																																																																																																																																																																				
11. MOUNTING	Front to rear: ≤ ± 15°																																																																																																																																																																																				
	Left to right : ≤ ± 45°																																																																																																																																																																																				



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