

# Abnahmeprüfzeugnis 3.1 Inspection certificate 3.1

nach DIN EN 10204  
acc. to DIN EN 10204

Rev.: 12-050115



## AERZEN

**Aerzener  
Maschinenfabrik GmbH**  
Reherweg 28  
31855 Aerzen - GERMANY  
☎: ++49(0) 51 54 / 81 0  
Fax: ++49(0) 51 54 / 81 9191  
E-Mail: info@aerzener.de  
Internet: www.aerzener.com

|  |  |  |  |   |   |   |  |  |  |
|--|--|--|--|---|---|---|--|--|--|
| Typ / type<br><br>GQA22.23   |  | Fabriknummer / serial no.<br><br>4067211   |  | Serialnummer/ serial no. unit<br><br>4067211  |   | KANR / purchase order no.<br><br>158540/199   |  |  |  |
| Besteller / committer<br>CPG Engineering & Commercial<br>Services GmbH   |  |  |  | Volumen pro Umdrehung q <sub>t</sub><br>volume per rotation q <sub>t</sub><br><br>3000,000 dm³/Umdr |   | Getriebeübersetzung i<br>gear transmission i<br><br>0,407   |  | π <sub>1</sub> / v <sub>i</sub>  |  |
| Bestelldaten<br>order data<br><br>2018P00053   |  |  |  |   |   | ITEM-Nr.:<br>ITEM-No.:<br><br>  |  | Betriebsfall<br>case<br><br>A  |  |
| Ansaugvolumen $\dot{V}$<br>intake volume flow $\dot{V}$<br><br>1019,29 m³/min  |  | Ansaugdruck p <sub>1</sub><br>intake pressure p <sub>1</sub><br><br>1,111 bar(abs.)  |  | Enddruck p <sub>2</sub><br>discharge pressure p <sub>2</sub><br><br>1,993 bar(abs.)                 |   | Druckunterschied p <sub>1</sub> - p <sub>2</sub><br>pressure difference p <sub>1</sub> - p <sub>2</sub><br><br>882 mbar |  | Fördermedium<br>conveying medium<br><br>PROZESSGAS   |  |
| Ansaugtemperatur t <sub>1</sub><br>intake temperature t <sub>1</sub><br><br>52,0 °C  |  | Leistungbed. an der Verdichterkupplung P <sub>Ku</sub><br>powerconsumption on the coupling P <sub>Ku</sub><br><br>1877,30 kW |  | Antriebsdrehzahl n <sub>Mot</sub><br>driving speed n <sub>Mot</sub><br><br>1492,0 1/min             |   | Hauptkolbendrehzahl n <sub>HK</sub><br>main rotor speed n <sub>HK</sub><br><br>403,0 1/min                              |  | Dichte im Ansaugzustand ρ <sub>1</sub><br>density at intake conditions ρ <sub>1</sub><br><br>0,767 kg/m³ |  |
| Endtemperatur t <sub>2</sub><br>discharge temperature t <sub>2</sub><br><br>71,0 °C  |  | Durchflussrichtung<br>direction of flow  |  | Index V = Versuch<br>= test   |   | Auswertung<br>evaluation  |  | φ <sub>0</sub><br>42 %   |  |
| t <sub>0,V</sub><br>21,0 °C  |  | t <sub>1,V</sub><br>20,0 °C  |  | t <sub>2,V</sub><br>61,0 °C   |   | n <sub>M,V</sub><br>450 1/min   |  | t <sub>0</sub><br>20,0 °C  |  |
| P <sub>M1,V</sub><br>bar   |  | P <sub>M2,V</sub><br>bar   |  | P <sub>1,V</sub><br>mbar  |   | P <sub>2,V</sub><br>mbar  |  | p <sub>0</sub><br>997 mbar   |  |
| Blende<br>orifice<br>DIN EN ISO 5167-1   |  | mm Ø   |  | P <sub>2,V</sub> - P <sub>1,V</sub><br>mbar   |   | P <sub>1,V</sub><br>kg/m³   |  |  |  |
| ΔP <sub>V</sub><br>mbar  |  | T <sub>1,V</sub><br>K  |  | T <sub>1,V</sub><br>K   |   | T <sub>1,V</sub><br>K   |  |  |  |
| t <sub>0,V</sub><br>°C   |  | t <sub>1,V</sub><br>°C   |  | t <sub>2,V</sub><br>°C  |   | n <sub>M,V</sub><br>1/min   |  |  |  |
| P <sub>M,V</sub><br>kW   |  | P <sub>Ku,V</sub><br>kW  |  | P <sub>Ku,V</sub><br>kW   |   | P <sub>Ku,V</sub><br>kW   |  |  |  |
| t <sub>0,V</sub><br>°C   |  | t <sub>1,V</sub><br>°C   |  | t <sub>2,V</sub><br>°C  |   | n <sub>M,V</sub><br>1/min   |  |  |  |
| P <sub>0,V</sub><br>bar  |  | P <sub>0,V</sub><br>bar  |  | P <sub>0,V</sub><br>bar   |   | P <sub>0,V</sub><br>bar   |  |  |  |
| Messwerte umgerechnet auf Bestelldaten in Anlehnung an die ISO 1217<br>Measuring values converted into order data based acc. to ISO 1217 |  |  |  |   |   |   |  |  |  |
| Index um = umgerechnet auf Bestelldaten<br>= converted into order data   |  |  |  |   |   |   |  |  |  |
| t <sub>0,um</sub><br>0,82  |  | t <sub>1,um</sub><br>217,94  |  | t <sub>2,um</sub><br>1.209,00   |   | n <sub>M,um</sub><br>991,06   |  | P <sub>Ku,um</sub><br>-2,77  |  |
| m³/min   |  | m³/min   |  | m³/min  |   | m³/min  |  | %  |  |
| P <sub>M1,um</sub><br>0,82   |  | P <sub>M2,um</sub><br>217,94   |  | P <sub>1,um</sub><br>1.209,00   |   | P <sub>2,um</sub><br>991,06   |  | P <sub>Ku,um</sub><br>-2,38  |  |
| m³/min   |  | m³/min   |  | m³/min  |   | m³/min  |  | %  |  |
| Maximale Erprobungsdaten<br>Maximum test data  |  |  |  |   | Abnahmestempel /<br>acceptance stamp              |   |  |  |  |
| p <sub>1</sub><br>0,021 bar  |  | t <sub>1,max</sub><br>66 °C  |  | n <sub>HK,max</sub><br>183 1/min  |   |   |  |  |  |
| p <sub>2e</sub><br>0,710 bar   |  | t <sub>2,max</sub><br>116 °C   |  |   |   |   |  |  |  |
| Datum<br>date<br><br>01.03.2019  |  | Name<br>name<br><br>F. Ehrhardt  |  | Ehrhardt  |   |   |  |  |  |
| Bemerkungen / remarks  |  |  |  |   | Stempel für Druckprobe<br>Stamp for pressure test |   |  |  |  |
|  |  |  |  |   |   |   |  |  |  |
|  |  |  |  |   | Prüfstand Nr.:<br>test bench no.:<br>03           |   |  |  |  |
|  |  |  |  |   | F 161      D 162                                  |   |  |  |  |