

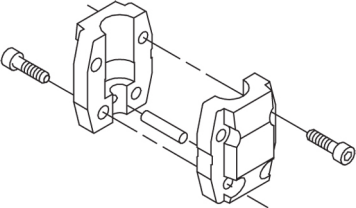
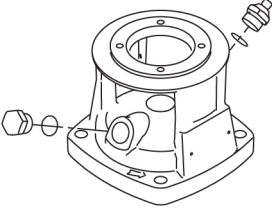


Position	Qty.	Description
	1	<p data-bbox="362 159 663 185">CR 5-20 A-FGJ-A-E-HQQE</p>  <p data-bbox="362 483 624 510">Product No.: 96517052</p> <p data-bbox="362 544 1445 618">Vertical, multistage centrifugal pump with suction and discharge ports on same the level (in-line) enabling installation in a horizontal one-pipe system. The pump head and base are in cast iron – all other wetted parts are in stainless steel.</p> <p data-bbox="362 629 1414 714">A cartridge shaft seal ensures high reliability, safe handling and easy service and access. Power transmission is via a split coupling. Pipework connection is via combined DIN-ANSI-JIS flanges. The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="362 745 676 772">Further product details</p> <p data-bbox="362 781 1390 855">The product carries the Grundfos Blueflux® label. It represents the best from Grundfos within energy-efficient motors and frequency converters. Grundfos Blueflux® solutions either meet or exceed legislative requirements such as the EuP IE3 or IE4 grade.</p>  <p data-bbox="362 1041 1445 1162">Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An integral part of the process is a pretreatment. The entire process consists of these elements:</p> <ol data-bbox="362 1182 1062 1328" style="list-style-type: none"> 1) Alkaline-based cleaning. 2) Zinc phosphating. 3) Cathodic electro-deposition. 4) Curing to a dry film thickness 18-22 my m. <p data-bbox="362 1301 1062 1328">The colour code for the finished product is NCS 9000/RAL 9005.</p> <p data-bbox="362 1359 440 1386">Pump</p> <p data-bbox="362 1395 1453 1447">A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards.</p>  <p data-bbox="362 1693 1437 1744">The pump head, pump head cover and flange for motor mounting is made in one piece. The pump head has a combined 1/2" priming plug and air vent screw.</p> 

The pump is fitted with a balanced O-ring seal unit with rigid torque transmission system. This seal type is assembled in a cartridge unit which makes replacement safe and easy. Due to the balancing, this seal type is suitable for high-pressure applications. The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.

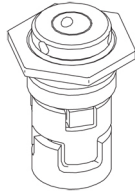
Primary seal:

- Rotating seal ring material: Silicon carbide (SiC)
- Stationary seat material: Silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: EPDM (ethylene-propylene rubber)

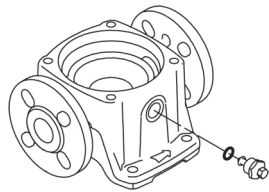
EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.



The shaft seal is screwed into the pump head.

The chambers and impellers are made of stainless steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.

The base is made of cast iron. The flanges and base are cast in one piece. The discharge side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate.



Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with tapped-hole flange (FT).

Motor mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II). Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE3 in accordance with IEC 60034-30.

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

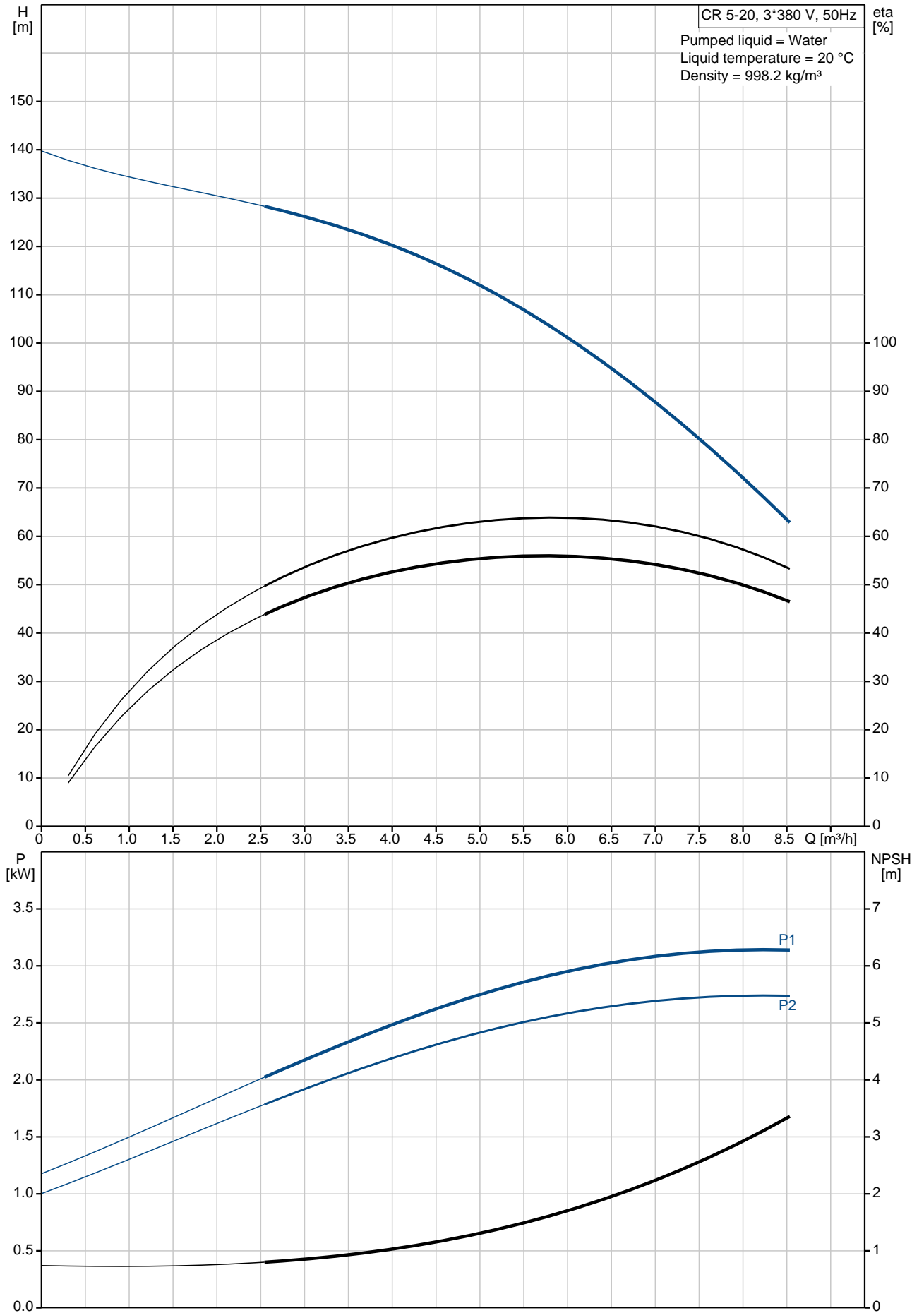
Technical data

Liquid:

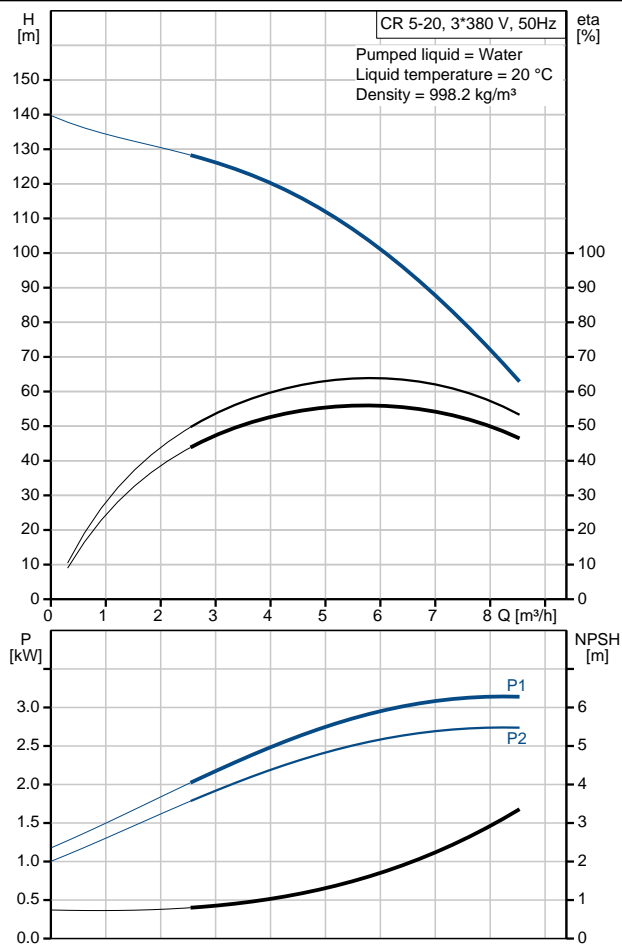
Pumped liquid:	Water
Liquid temperature range:	-20 .. 120 °C
Liquid temp:	20 °C
Density:	998.2 kg/m ³
Kinematic viscosity:	1 mm ² /s

Position	Qty.	Description
		<p>Technical: Speed for pump data: 2902 rpm Rated flow: 5.8 m³/h Rated head: 103 m Shaft seal: HQQE Approvals on nameplate: CE,TR Curve tolerance: ISO 9906:1999 Annex A</p> <p>Materials: Pump housing: Cast iron EN-JL1030 ASTM A48-30 B Impeller: Stainless steel DIN W.-Nr. 1.4301 AISI 304</p> <p>Installation: Maximum ambient temperature: 60 °C Max pressure at stated temp: 25 bar / 120 °C 25 bar / -20 °C Flange standard: DIN Pipe connection: DN 25 / DN 32 Pressure stage: PN 16 / PN 25 Flange size for motor: FT130</p> <p>Electrical data: Motor type: 100LC IE Efficiency class: IE3 Number of poles: 2 Rated power - P2: 3 kW Power (P2) required by pump: 3 kW 3 kW Mains frequency: 50 Hz Rated voltage: 3 x 220-240 D/380-415 Y V Rated current: 11,0/6,30 A Starting current: 840-920 % Cos phi - power factor: 0,87-0,82 Rated speed: 2900-2920 rpm Efficiency: IE3 87,1% Motor efficiency at full load: 87,1-87,1 % Motor efficiency at 3/4 load: 88,0-87,0 % Motor efficiency at 1/2 load: 87,7-85,4 % Enclosure class (IEC 34-5): 55 (Protect. water jets/dust) Insulation class (IEC 85): F</p> <p>Others: Label: Grundfos Blueflux Minimum efficiency index, MEI : 0.57 Net weight: 53.5 kg Gross weight: 58.8 kg Shipping volume: 0.11 m³</p>

96517052 CR 5-20 50 Hz

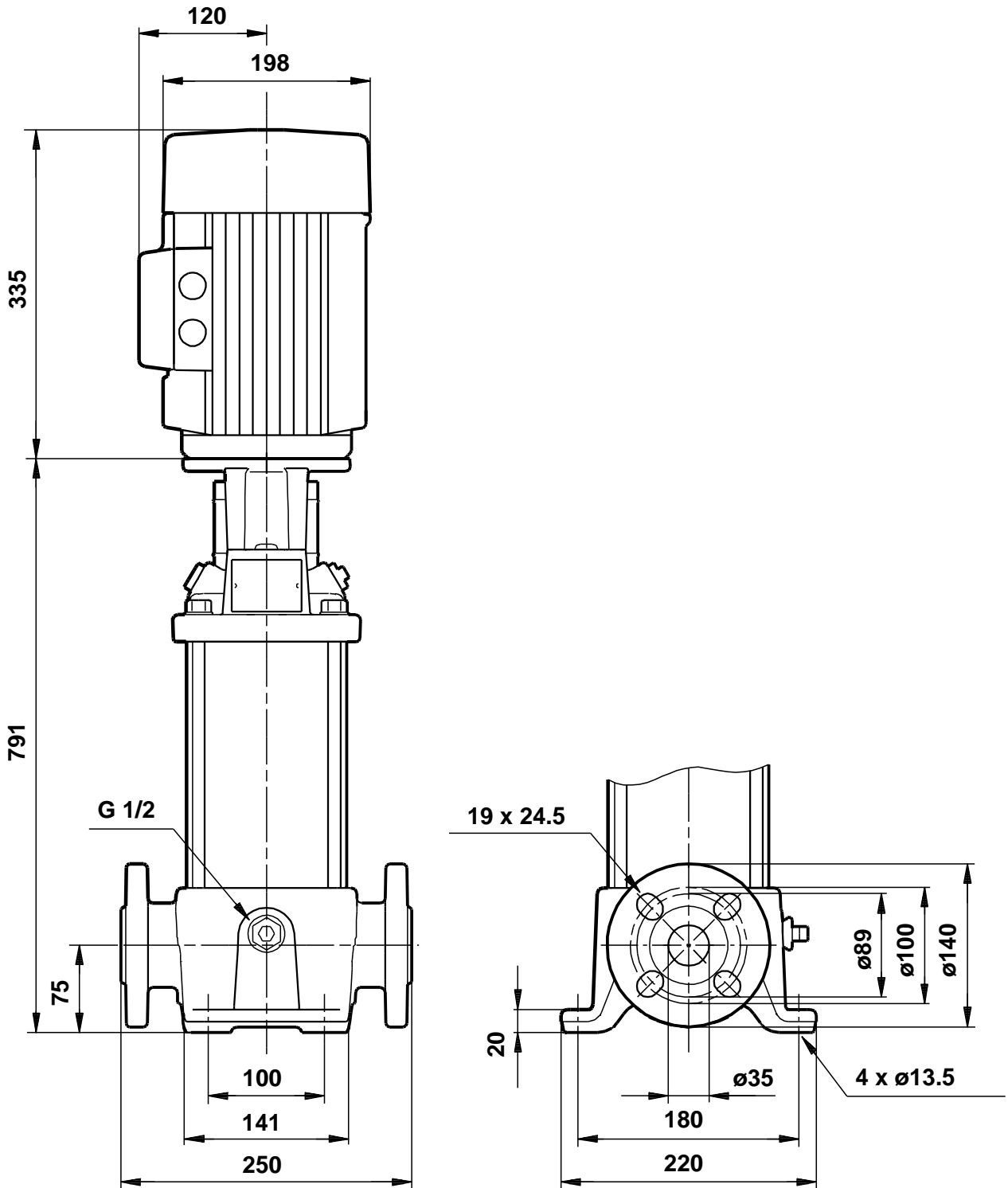


Description	Value
General information:	
Product name:	CR 5-20 A-FGJ-A-E-HQQE
Product No:	96517052
EAN number:	5700396755267
Price:	On request
Technical:	
Speed for pump data:	2902 rpm
Rated flow:	5.8 m ³ /h
Rated head:	103 m
Head max:	136 m
Impellers:	20
Shaft seal:	HQQE
Approvals on nameplate:	CE, TR
Curve tolerance:	ISO 9906:1999 Annex A
Pump type:	CR 5
Stages:	20
Pump version:	A
Model:	A
Materials:	
Pump housing:	Cast iron EN-JL1030
	ASTM A48-30 B
Impeller:	Stainless steel DIN W.-Nr. 1.4301 AISI 304
Material code:	A
Code for rubber:	E
Installation:	
Maximum ambient temperature:	60 °C
Max pressure at stated temp:	25 bar / 120 °C 25 bar / -20 °C
Flange standard:	DIN
Connect code:	FGJ
Pipe connection:	DN 25 / DN 32
Pressure stage:	PN 16 / PN 25
Flange size for motor:	FT130
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 .. 120 °C
Liquid temp:	20 °C
Density:	998.2 kg/m ³
Kinematic viscosity:	1 mm ² /s
Electrical data:	
Motor type:	100LC
IE Efficiency class:	IE3
Number of poles:	2
Rated power - P2:	3 kW
Power (P2) required by pump:	3 kW 3 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240 D/380-415 Y V
Rated current:	11,0/6,30 A
Starting current:	840-920 %
Cos phi - power factor:	0,87-0,82
Rated speed:	2900-2920 rpm
Efficiency:	IE3 87,1%
Motor efficiency at full load:	87,1-87,1 %
Motor efficiency at 3/4 load:	88,0-87,0 %
Motor efficiency at 1/2 load:	87,7-85,4 %
Enclosure class (IEC 34-5):	55 (Protect. water jets/dust)
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	85U05510
Others:	



Description	Value
Label:	Grundfos Blueflux
Minimum efficiency index, MEI :	0.57
Net weight:	53.5 kg
Gross weight:	58.8 kg
Shipping volume:	0.11 m3

96517052 CR 5-20 50 Hz



Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.