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Designation:
wire diagram TEM-Evo-AGS
Order No.: 646324/646325/646326/646328/646329/646331
part number 1247 4827 UE 0479-91

Type: TCG 2032 V16 =A1 +T1

Page: 00

Material list:
TCG 2032 V16
1247 4827 UE 0479-91

State:
05-02-07

Engine:
Schild
Bogra Bangladesh
1.) The operating terminal and the I/O-Controller are delivered as loose parts. The I/O-Controller has to be mounted in the cabinet for auxiliaries and generator protection by the customer.

2.) For supply see page 10.

3.) Unless otherwise specified external cables are to be wired with at least 1,0 mm². For shielded lines 0,75 mm² are sufficient. Remark: flexible, oil resisting and fine-strand control lines must be used (e.g. NYSLYÔ or NYSLYCYÔ).

4.) For connection of shielded lines the shielding may be removed up to max. 15 cm length.

5.) Contacts of security chain inputs must be rated at 2 A, 30 V min.

6.) Digital inputs must apply at least 150 ms unless they are recognized reliably by the TEM system.

7.) Unless otherwise specified internal cables are to be wired with at least 0,75 mm². For shielded lines 0,25 mm² are sufficient.

8.) In case of mains or generator fault the power switch has to be opened directly and quickly to minimize delays.

9.) To enable an idle circuit of the corresponding auxiliaries in case of using the emergency button, the operating voltage must be connected or disconnected via relay +A1H1-K100.

10.) Safety-critical messages always have to lead to switching off via security chain. For signalling messages are connected to the TEM via parametrizable messages.

11.) (not applicable)

12.) Notation system for location under DIN 40719 part 2
   polarity sign (+), place 4-digit:
   \[=A1+T1: \text{TEM cabinet 1} \quad ... =A1+Tx: \text{Genset TEM x}\]
   \[=A1+A1: \text{gensen 1} \quad ... =A1+Ax: \text{gensen x}\]
   \[=A1+H1: \text{auxiliaries cabinet 1} \quad ... =A1+Hx: \text{auxiliaries gensen x}\]
   \[=A1+E1: \text{external 1}\]

13.) Notation system for components under DIN 40719 part 2
   polarity sign (-), species (K,F,U,A,...), page No. 1..2-digit, path of current No. 1-digit, e.g.: -U17, -A172

14.) Notation system for terminals and conn. under DIN 40719 part 2
   polarity sign (-), species (X = terminal, J = connector)

15.) Notation system for cross-references under DIN 40719 part 2
   page No. 1..2-digit, point, path of current No. 1-digit, e.g.: 2.6, 18.0

abbreviations:
- AGS: gensen cabinet
- GK: intercooler
- HA: auxiliaries
- HAS: auxiliaries cabinet
- HK: heating circuit
- MK: jacket water circuit
- KWT: cooling water heat exchanger
- NK: emergency cooler
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<td>TEM-Evo-AGS</td>
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reserved

Date: 25.01.07
Plant: Bogra Bangladesh
Resp.: Schild
Chkd.: Bardel
Designation: TEM-Evo-AGS
Order no.: 646324/646325/646326/646328/646329/646331
Type: TCG 2032 V16
Ident No.: 0479-91
Page: 2

from 40
enable power switch

+24V at enable (demand)

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wire diagram

TEM-Evo-AGS

Order no.
646324/646325/646326/
646328/646329/646331

Type
TCG 2032 V16

part number
1247 4827

Ident no.
UE 0479-91

Page 4

from 40
If A1 opens, the ventilation valve must close.

ventilation

from the gas supply

gas valve A1

gas valve A2

to the gas mixer

ventilation valve A1 pneumatically actuated

ventilation valve A2 pneumatically actuated

interface to gas control system
reserved
Low water protection

Plant: Bogra Bangladesh

Date: 25.01.07

Resp.: Schild

Chkd.: Bardel

Engine TEM-Evo-AGS

Desination: wir.diagram

Order no: 646324/646325/646326/646332/646331

Type: TCG 2032 V16

Identare no: 1247 4827

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**reserved (8-9)**
supply TEM cabinet (+A1T1)

battery/mains device (*).

supply TEM cabinet
24 V ±15% residual ripple < 0.5 Vss
protection with 25 A

necessary cross section
6 mm²: to 12 m
10 mm²: to 20 m
16 mm²: to 33 m
average current consumption 12 A
peak current 16 A

---

* connection only for external control battery. Do NOT connect to starter battery!

** Remove bridging between PE and L- if connection exists already in the power supply.

---

Equipotential bonding between TEM-Evo and genset. The ground connection has to be wired before start up.
security chain: switching off gas valves, starter

gas valves, starter, ignition

gas valve

gas control system

Homologation of all relay under VDE 0435
All contactors under VDE 0668
secu.chain, quick stop, reset, emerg. switch
Turning device, preheating genset

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Starter inhibited for turning machine operation

Differential pressure crank case fan closes for diff. pressure > min not assigned

356

Enable warning opens for alarm

156
combustion chamber temp., bank A, receiver

tem intake and exhaust after ATL

side A

receiver A

Main bearing
number

461-468
VME power supply PS50

\[ \begin{align*}
0V & \quad 0V +24V +24V \\
+15V & \quad \text{GND} -15V
\end{align*} \]

\(-U181\)

Voltage supply +/- 15 V analog inputs

\(-D161\)

\(-D171\)

\[\begin{align*}
\text{Power} & \quad \text{Iso} & \quad \text{GND} \\
41 & \quad 42 & \quad 20 & \quad 21 & \quad 62 & \quad 61
\end{align*}\]

\[\begin{align*}
\text{YE/GR/BK} & \quad \text{GR/PK/BK} & \quad \text{WH/BN/BK} & \quad \text{YE/BN/BK} & \quad \text{WH/YE/BK}
\end{align*}\]

\[\text{YE/GR/BK} \quad \text{GR/PK/BK} \quad \text{WH/BN/BK} \quad \text{WH/YE/BK} \quad \text{GND} -15V +15V\]

\(-D161\)

\(-D171\)

\[\begin{align*}
-\text{J161} & \quad -\text{M161} & \quad -16.9 & \quad -\text{W161} & \quad -19.0 \\
-\text{J171} & \quad -\text{M171} & \quad -17.9 & \quad -\text{W171} & \quad -19.8
\end{align*}\]

\[\text{XJ06-PE} 30.7\]

\text{AGND} 19.0

+15V A 19.0

\(25.01.06\)

\(1247 4827\)

\(0479-91\)

\(\text{DEHN-AGS}\)
temperature, pressure + oil level measure. genset
Remark:
The potential of the shields is floating with respect to PE.
Avoid short circuits to PE by careful insulation.
Do not connect the shields on the generator side.
temperature measurement: generator bearings
ATL speed

ATL Interface
2 Insulated Sensor Inputs
1247 3951 XZ

S1+ S1-
1 2

S2+ S2-
3 4

+AI -C

20.1 W E

+AI -W E

20.9

30.5

W E

35 36

AV

W C

16.0

£

ATL speed A
492

ATL speed B
493

Date 25.01.07 Plant Bogra Bangladesh
Resp. Schild Plant section
Chkd. Bardel Engine
State modif. date Norm 25.01.06 Source replacem. f.

© 2006 wir.diagram TEM-Evo-AGS 1247 4827 UE 0479-91

Order no. 646324/646325/646326/646328/646330/646329/646331
Type TCG 2032 V16 +AI +TL
part number Identare no. page 23
from 40
reserved
reserve terminals

Date 25.01.07 Plant Bogra Bangladesh
Resp. Schild Plant section
Chkd. Bardel Engine

Designation TEM-Evo-AGS
Order no. 646324/646325/646326/
646328/646329/646331
part number 1247 4827
Identf. no. 0479-91
page 25
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**reserve terminals**

© 2006

Part number: 1247 4827
Ident. no.: UE 0479-91
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**Resolved**

- **Plant section**: TCG 2032 V16
- **Engine**: TEM-Evo-AGS
- **Designation**: 1247 4827
- **Identur no.**: 0479-91

**Source**

- **Part number**: 646324/646325/646326/646328/646329/646331
- **reserved**
exhaust back pressure

too high
opens for too high pressure

transmitter exhaust back pressure
<table>
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stepper motor card, mixer, bank A
stepper motor card, mixer, bank B

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<td>25.01.06</td>
<td>Source</td>
<td>replace. f.</td>
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stepper motor card at the gas mixer
triggering aux. relay, speed governor, starter

* contactors under VDE 0660
serial interface for site control syst.

alternatively:
connection interface TEM passive

20 mA current loop active
insulation supply L-
(ground of 24V-supply in the TEM cabinet): max. 100 V

20 mA current loop passive

supply for source of current

PE

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interface to operating terminal and IAE

see wiring diagram
TEM-Evo modem system
1247 4829 UE 0479-91

see wiring diagram
TEM-Evo-I/O-Controller
1247 4828 UE 0479-91

- D361
TTY interface
mounted in -D144

- W361

- J361

- X362

- A364

- D364

- D365
TTY interface
mounted in -D144

- W365

- J365

- X365

### Slot Overview TEM Terminal

**Designation:** TEM-Evo-AGS  
**Order no.:** 1247 4827  
**UE:** 0479-91

<table>
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**Plant:** Bogra Bangladesh  
**Resp.:** Schild  
**Plant section:** Engine  
**Date:** 25.01.07  
**Chkd.:** Bardel  
**Date:** 25.01.06

### Settings of the DIP Switches

- **CPU**
- **Knock governor**
- **Analog input**
- **Analog input**
- **Digital input/output**
- **Speed governor**
- **Empty slot (blind covering)**
- **Step motor card**
- **Step motor card**
- **Mix (blind covering)**
- **Mix (blind covering)**
- **Power supply**
- **Supply 24V**

### Plant Data

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© 2006
bores
M 16: 16.5 mm
M 25: 25.5 mm
M 32: 32.5 mm

cable inlets base plate
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<th>item No.</th>
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<td>DEUTZ</td>
<td>=A1+T1-F118, =A1+T1-F124, =A1+T1-F120</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>3</td>
<td>circuit breaker 6A type B</td>
<td>5 700 130</td>
<td>DEUTZ</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* not delivered by Deutz

** Please state order no. when ordering spare part