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# Customer information packet

## CEM2534T

30HP, 3530RPM, 3PH, 60HZ, 284TSC, OPSB, F1

## Specifications

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | OPSB                                                           |
| Frame                          | 284TSC                                                         |
| Frame Material                 | Steel                                                          |
| Frequency                      | 60.00 Hz                                                       |
| Motor Letter Type              | Three Phase                                                    |
| Output @ Frequency             | 30.000 HP @ 60 HZ                                              |
| Phase                          | 3                                                              |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                               |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| Agency Approvals               | CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR                  |
| Ambient Temperature            | 40 °C                                                          |
| Auxiliary Box                  | NO AUXILLARY BOX                                               |
| Auxiliary Box Lead Termination | None                                                           |
| Base Indicator                 | Rigid                                                          |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                        |
| Blower                         | None                                                           |
| Current @ Voltage              | 76.000 A @ 208.0 V<br>70.000 A @ 230.0 V<br>35.000 A @ 460.0 V |
| Design Code                    | A                                                              |
| Drip Cover                     | No Drip Cover                                                  |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 91.7 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK                                                    |
| Heater Indicator               | No Heater                                                      |
| High Voltage Full Load Amps    | 35.0 a                                                         |
| Insulation Class               | F                                                              |

## Part detail

|              |            |
|--------------|------------|
| Revision     | E          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 40WGX193   |
| Layout       | 40LYE217   |
| Eff. date    | 02-12-2024 |
| CD Diagram   | CD0180     |
| Poles        | 02         |
| Leads        | 9#8        |
| Proprietary  | False      |
| Created date | 03-06-2020 |

|                                   |                              |
|-----------------------------------|------------------------------|
| <b>Inverter Code</b>              | <b>Inverter Ready</b>        |
| <b>IP Rating</b>                  | <b>NONE</b>                  |
| <b>KVA Code</b>                   | <b>H</b>                     |
| <b>Lifting Lugs</b>               | <b>Standard Lifting Lugs</b> |
| <b>Locked Bearing Indicator</b>   | <b>Locked Bearing</b>        |
| <b>Motor Lead Termination</b>     | <b>Flying Leads</b>          |
| <b>Motor Standards</b>            | <b>NEMA</b>                  |
| <b>Motor Type</b>                 | <b>4040M</b>                 |
| <b>Mounting Arrangement</b>       | <b>F1</b>                    |
| <b>Number of Poles</b>            | <b>2</b>                     |
| <b>Overall Length</b>             | <b>22.44 IN</b>              |
| <b>Power Factor</b>               | <b>87</b>                    |
| <b>Product Family</b>             | <b>General Purpose</b>       |
| <b>Pulley Face Code</b>           | <b>C-Face</b>                |
| <b>Rodent Screen</b>              | <b>None</b>                  |
| <b>Service Factor</b>             | <b>1.15</b>                  |
| <b>Shaft Diameter</b>             | <b>1.625 IN</b>              |
| <b>Shaft Ground Indicator</b>     | <b>No Shaft Grounding</b>    |
| <b>Shaft Rotation</b>             | <b>Reversible</b>            |
| <b>Speed</b>                      | <b>3530 rpm</b>              |
| <b>Speed Code</b>                 | <b>Single Speed</b>          |
| <b>Starting Method</b>            | <b>Direct on line</b>        |
| <b>Thermal Device - Bearing</b>   | <b>None</b>                  |
| <b>Thermal Device - Winding</b>   | <b>None</b>                  |
| <b>Vibration Sensor Indicator</b> | <b>No Vibration Sensor</b>   |
| <b>Winding Thermal 1</b>          | <b>None</b>                  |
| <b>Winding Thermal 2</b>          | <b>None</b>                  |

## Nameplate

| NP2138L      |              |          |    |        |       |        |     |            |          |           |         |      |      |        |      |
|--------------|--------------|----------|----|--------|-------|--------|-----|------------|----------|-----------|---------|------|------|--------|------|
| CAT.NO.      | CEM2534T     |          |    |        | P/N   |        |     |            |          | ENCLOSURE |         | OPSB |      |        |      |
| SPEC.        | 40-0000839   |          | CC | 010A   |       | FRAME  |     | 284TSC     |          | S/N       |         |      |      |        |      |
| HP           | 30           |          |    |        | CLASS |        | F   | HZ         |          | 60        |         |      |      |        |      |
| RPM          | 3530         |          |    |        | PH    | 3      | DES |            | A        |           |         |      |      |        |      |
| VOLT         | 230/460      |          |    |        |       |        |     |            | KVA-CODE | H         | ODE BRG |      | 6309 | DE BRG | 6311 |
| AMP          | 70/35        |          |    |        |       |        |     |            |          |           |         |      |      |        |      |
| RATING       | 40C AMB-CONT |          |    |        |       | GREASE |     | POLYREX EM |          |           |         |      |      |        |      |
| NEMA-NOM-EFF | 91.7         | PF       | 87 | SER.F. |       | 1.15   |     |            |          |           |         |      |      |        |      |
|              |              |          |    |        |       |        |     |            |          |           |         |      |      |        |      |
| HTR-VOLTS    |              | HTR-AMPS |    |        |       |        |     |            |          |           |         |      |      |        |      |

## AC Induction Motor Performance Data

Record # 50428

Typical performance - not guaranteed values

| Winding: 40WGX193-R005 |  |         |  | Type: 4040M                              |  | Enclosure: OPSB           |  |
|------------------------|--|---------|--|------------------------------------------|--|---------------------------|--|
| Nameplate Data         |  |         |  | 460 V, 60 Hz:<br>High Voltage Connection |  |                           |  |
| Rated Output (HP)      |  | 30      |  | Full Load Torque                         |  | 44.7 LB-FT                |  |
| Volts                  |  | 230/460 |  | Start Configuration                      |  | direct on line            |  |
| Full Load Amps         |  | 70/35   |  | Breakdown Torque                         |  | 175 LB-FT                 |  |
| R.P.M.                 |  | 3530    |  | Pull-up Torque                           |  | 59.3 LB-FT                |  |
| Hz                     |  | 60      |  | Phase                                    |  | 3                         |  |
| NEMA Design Code       |  | A       |  | KVA Code                                 |  | H                         |  |
| Service Factor (S.F.)  |  | 1.15    |  | Locked-rotor Torque                      |  | 78.3 LB-FT                |  |
| NEMA Nom. Eff.         |  | 91.7    |  | Power Factor                             |  | 87                        |  |
| Rating - Duty          |  | 40C     |  | AMB-CONT                                 |  | Starting Current          |  |
| S.F. Amps              |  |         |  |                                          |  | 240 A                     |  |
|                        |  |         |  |                                          |  | No-load Current           |  |
|                        |  |         |  |                                          |  | 11.2 A                    |  |
|                        |  |         |  |                                          |  | Line-line Res. @ 25°C     |  |
|                        |  |         |  |                                          |  | 0.21802 Ω                 |  |
|                        |  |         |  |                                          |  | Temp. Rise @ Rated Load   |  |
|                        |  |         |  |                                          |  | 23°C                      |  |
|                        |  |         |  |                                          |  | Temp. Rise @ S.F. Load    |  |
|                        |  |         |  |                                          |  | 28°C                      |  |
|                        |  |         |  |                                          |  | Locked-rotor Power Factor |  |
|                        |  |         |  |                                          |  | 24                        |  |
|                        |  |         |  |                                          |  | Rotor inertia             |  |
|                        |  |         |  |                                          |  | 1.72 LB-FT2               |  |

## Load Characteristics 460 V, 60 Hz, 30 HP

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 58     | 77     | 84     | 87     | 88     | 89     | 88   |
| Efficiency      | 89.3   | 92.8   | 93.4   | 93.2   | 92.6   | 91.8   | 92.8 |
| Speed           | 3582.7 | 3568.7 | 3554.6 | 3538.7 | 3522.3 | 3504.1 | 3529 |
| Line amperes    | 14.4   | 20.3   | 27.2   | 35.1   | 43.4   | 52.1   | 40.1 |

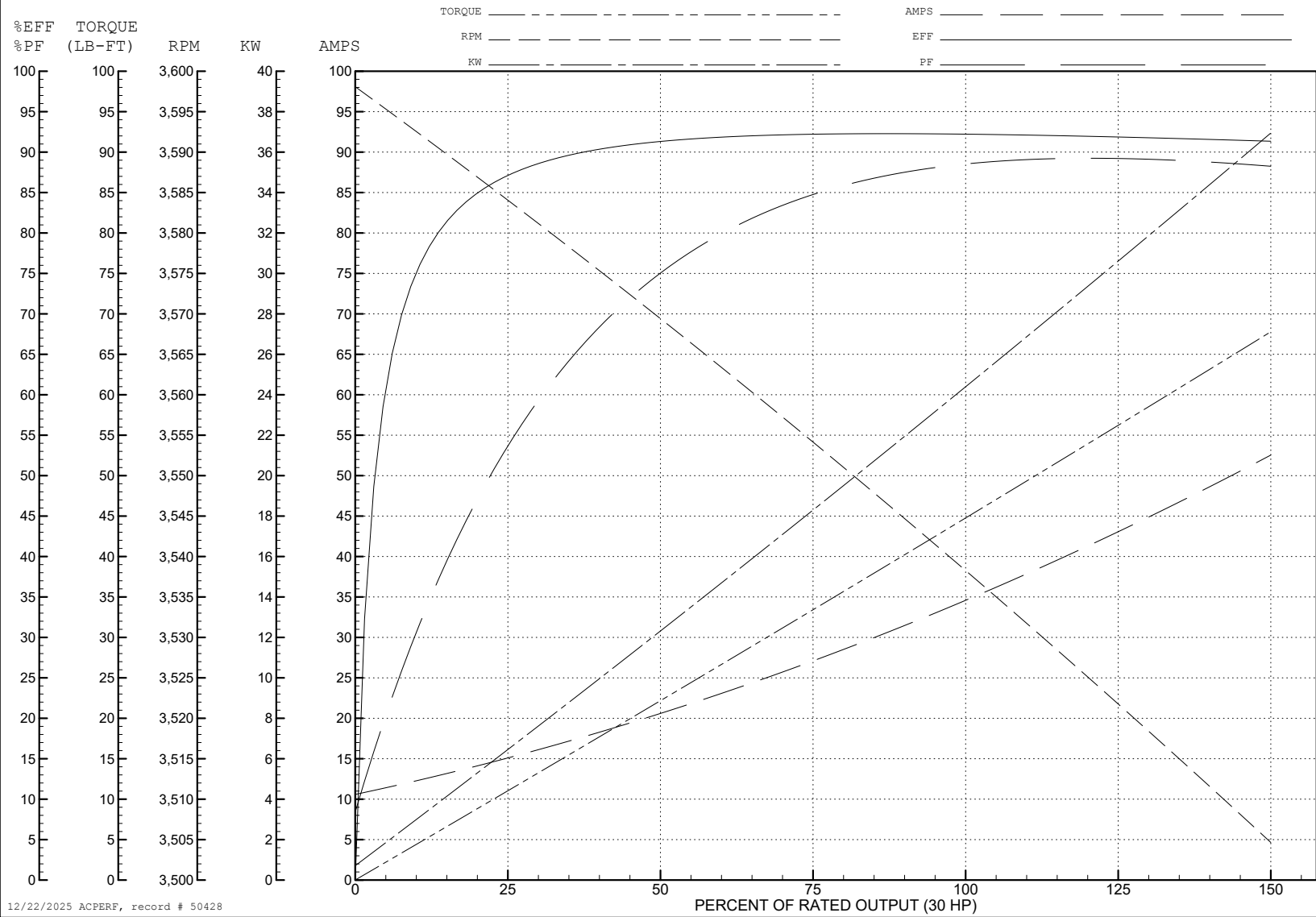
ABB Motors and Mechanical Inc.

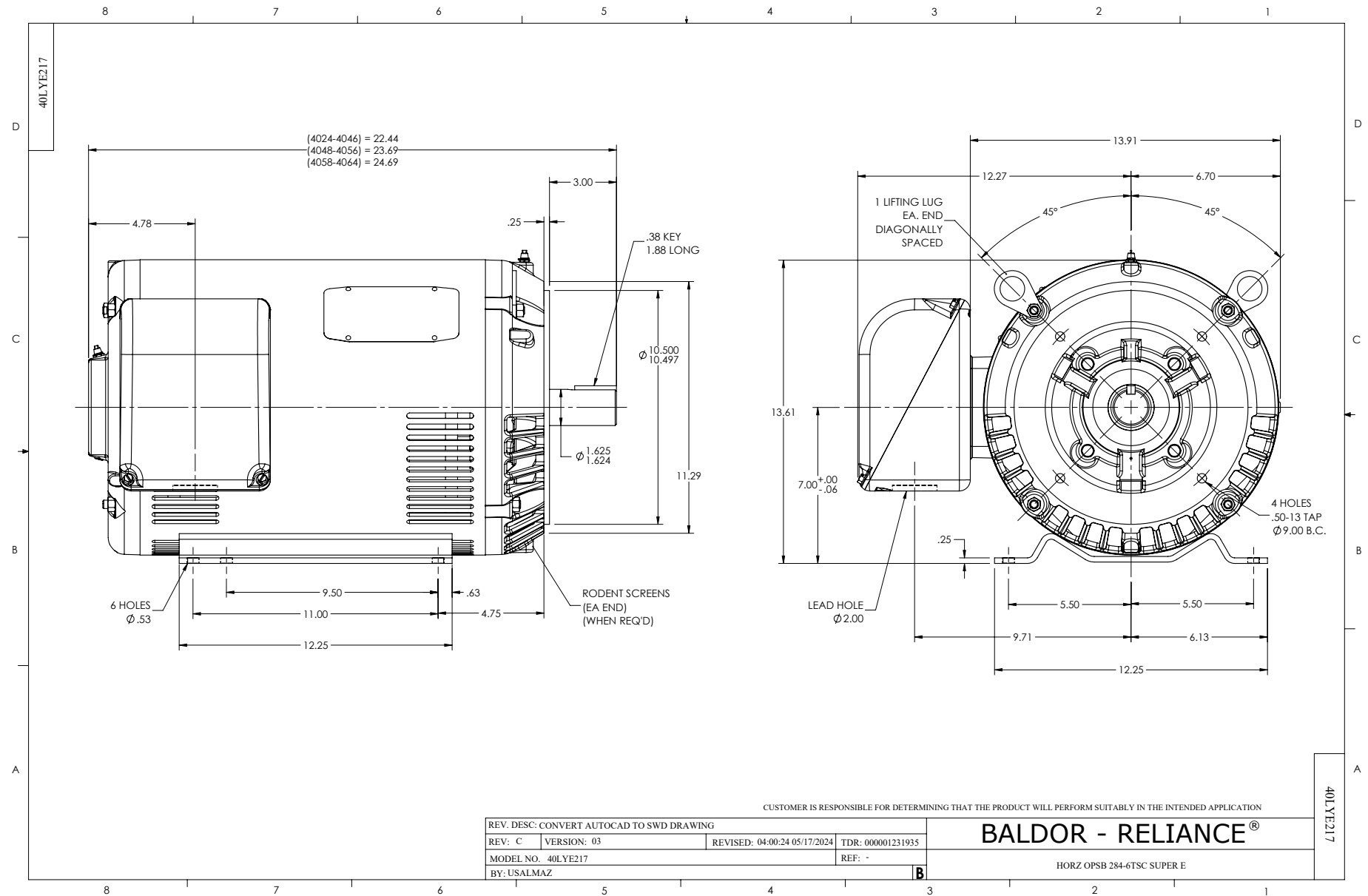
WINDING # 40WGX193

Typical performance - not guaranteed values.

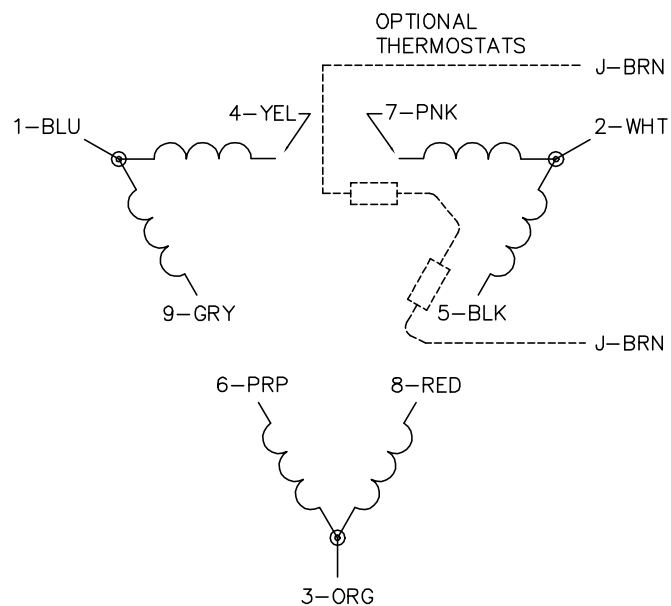
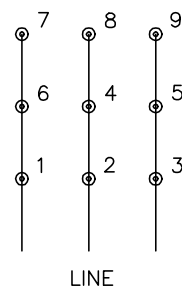
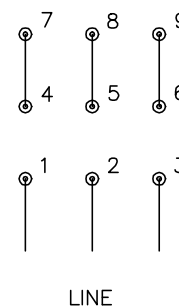
30 HP 3 PH 60 HZ 3530 RPM 460 V 4040M

TORQUES (LB-FT): PO=175 PU=59.3 LR=78.3 LRA=240





CD0180

LOW VOLTAGE  
(2D)HIGH VOLTAGE  
(1D)

## NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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