

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VXM18542T-5**

**5HP, 1750RPM, 3PH, 60HZ, 184TC, 3642M, XPFC, F1**

| Part Detail |    |             |            |             |        |               |            |
|-------------|----|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | -  | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | 36WGS551   | CD Diagram: | CD0006 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 36LYQ330   | Poles:      | 04     | Created Date: | 04-16-2021 |
| Base:       |    | Eff. Date:  | 04-26-2021 | Leads:      | 3#16   |               |            |

| Specs                           |                         |                           |                    |
|---------------------------------|-------------------------|---------------------------|--------------------|
| Catalog Number:                 | VXM18542T-5             | Heater Indicator:         | No Heater          |
| Enclosure:                      | XPFC                    | Insulation Class:         | B                  |
| Frame:                          | 184TC                   | Inverter Code:            | Inverter Duty      |
| Frame Material:                 | Steel                   | IP Rating:                | NONE               |
| Output @ Frequency:             | 5.000 HP @ 60 HZ        | KVA Code:                 | J                  |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Lifting Lugs:             | No Lifting Lugs    |
| Voltage @ Frequency:            | 575.0 V @ 60 HZ         | Locked Bearing Indicator: | Locked Bearing     |
| XP Class and Group:             | CLI GP D; CLII GP F,G   | Motor Lead Termination:   | Flying Leads       |
| XP Division:                    | Division I              | Motor Type:               | 3642M              |
| Agency Approvals:               | CSA                     | Mounting Arrangement:     | F1                 |
|                                 | CSA EEV                 | Power Factor:             | 78                 |
|                                 | UR                      | Product Family:           | General Purpose    |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:         | C-Face             |
| Auxillary Box Lead Termination: | None                    | Rodent Screen:            | None               |
| Base Indicator:                 | No Mounting             | Shaft Ground Indicator:   | No Shaft Grounding |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Rotation:           | Reversible         |
| Blower:                         | None                    | Speed Code:               | Single Speed       |
| Constant Torque Speed Range:    | 30                      | Motor Standards:          | NEMA               |

|                                       |                           |                                    |                            |
|---------------------------------------|---------------------------|------------------------------------|----------------------------|
| <b>Current @ Voltage:</b>             | 5.300 A @ 575.0 V         | <b>Starting Method:</b>            | Direct on line             |
| <b>Design Code:</b>                   | B                         | <b>Thermal Device - Bearing:</b>   | None                       |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Thermal Device - Winding:</b>   | Normally Closed Thermostat |
| <b>Duty Rating:</b>                   | CONT                      | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor        |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Winding Thermal 1:</b>          | None                       |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Winding Thermal 2:</b>          | None                       |
|                                       |                           | <b>XP Temp Code:</b>               | T3C                        |

| Nameplate NP0887XPSLEV |              |    |        |              |            |          |      |          |      |
|------------------------|--------------|----|--------|--------------|------------|----------|------|----------|------|
| NO.                    |              |    |        |              | CC         | 010A     |      |          |      |
| S/N                    |              |    |        |              | TEMP CODE  | T3C      |      |          |      |
| SPEC.                  | 36-0000-0474 |    |        |              | INV.TYPE   | PWM      |      |          |      |
| CAT.NO.                | VXM18542T-5  |    |        |              | C HP FR    | 60       |      | C HP TO  | 90   |
| HP                     | 5            |    |        |              | CT HZ FROM | 30       |      | CT HZ TO | 60   |
| VOLTS                  | 575          |    |        |              | VT HZ FROM | 6        |      | VT HZ TO | 60   |
| AMPS                   | 5.3          |    |        |              | MAG CUR    | 2.6      |      |          |      |
| RPM                    | 1750         |    |        |              | MX RPM     | 2700     |      |          |      |
| HZ                     | 60           | PH | 3      | CL           | F          | NOM.EFF. | 89.5 |          |      |
| SER.F.                 | 1.00         |    | DES    | B            | SL HZ      | 1.67     |      | WK2      | 0.39 |
| FRAME                  | 184TC        |    | RATING | 40C AMB-CONT |            |          |      |          |      |
| NEMA MG-1 PART 5, IP54 |              |    |        |              |            |          |      |          |      |
| 1.15 SF ON SINE WAVE   |              |    |        |              |            |          |      |          |      |
|                        |              |    |        |              |            |          |      |          |      |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA392842      | SA 36-0000-0474                          | 1.000 EA |
| RA383441      | RA 36-0000-0474                          | 1.000 EA |
| LB1119N       | WARNING LABEL                            | 1.000 EA |
| LC0006        | CONNECTION LABEL                         | 1.000 EA |
| PK3082        | STYROFOAM CRADLE                         | 1.000 EA |
| NP0887XPSLEV  | SS XP INV UL CSA-EEV CC CL-I GP-D        | 1.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 EA |
| MN416A01      | TAG-INSTAL-MAINT no wire (2100/bx) 4/22  | 1.000 EA |
| NP0018F       | ALUM UL XP CONDUIT BOX NAMEPLATE         | 1.000 EA |
| 36FH4009A02   | FAN COVER FOR VM7042T,PRIMER             | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 36FN3000C01SP | EXFN, PLASTIC, 5.25 OD, .912 ID          | 1.000 EA |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| MJ1000A02     | GREASE, MOBIL POLYREX EM - 124047        | 0.050 LB |
| HA3105A09     | THRUBOLT 3/8-16 X 12.000                 | 4.000 EA |
| 36EP3700A01   | FR ENDPLATE, MACH                        | 1.000 EA |
| HW5100A05     | WVY WSHR F/205 & 304 BRGS                | 1.000 EA |
| HW4500A19     | 1/4-28X1/4 SLOTTED PLUG F/S              | 2.000 EA |
| 36EP1703A01   | PU ENDPLATE, MACH                        | 1.000 EA |
| 84XN1032J20   | SCREW, SOC 10-32 X 1 1/4"BMH4602         | 2.000 EA |
| HW4001A01     | 1/4 HX SOC PIPE PLG (F/S) ALLOY STEEL W/ | 2.000 EA |
| 60XN1032A07   | 10-32 X .4375 TRUSS HEAD, TORX SERRATED  | 2.000 EA |
| HW3022E05     | .125 DIA X .500 ROLLED SPRING PIN        | 1.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| 35CB3001A02SP                 | EXPL PROOF CONDUIT BOX, 3/4"PIPE TAP LEA | 1.000 EA        |
| 11XW1032G06                   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA        |
| HW3001B01                     | BRASS CUP WASHER, FOR #10 SCREW          | 1.000 EA        |
| 35CB3500A01SP                 | CONDUIT BOX LID, MACH                    | 1.000 EA        |
| 51XN2520A16                   | SCREW, HEX WS SLT, ZN, 1/4-20 X 1.00     | 4.000 EA        |
| MG1500Y02                     | WILKOPON PRIMER YELLOW                   | 0.022 GA        |
| MG1025G29                     | WILKOFASST, 789.229, DARK CHARCOAL GRAY  | 0.022 GA        |
| 36PA1001                      | PKG GRP, PRINT PK1017A06                 | 1.000 EA        |
| HW2501E19                     | STD SQUARE KEY .25 SQUARE X 2.125 LONG   | 1.000 EA        |
| HA7000A02                     | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 59631

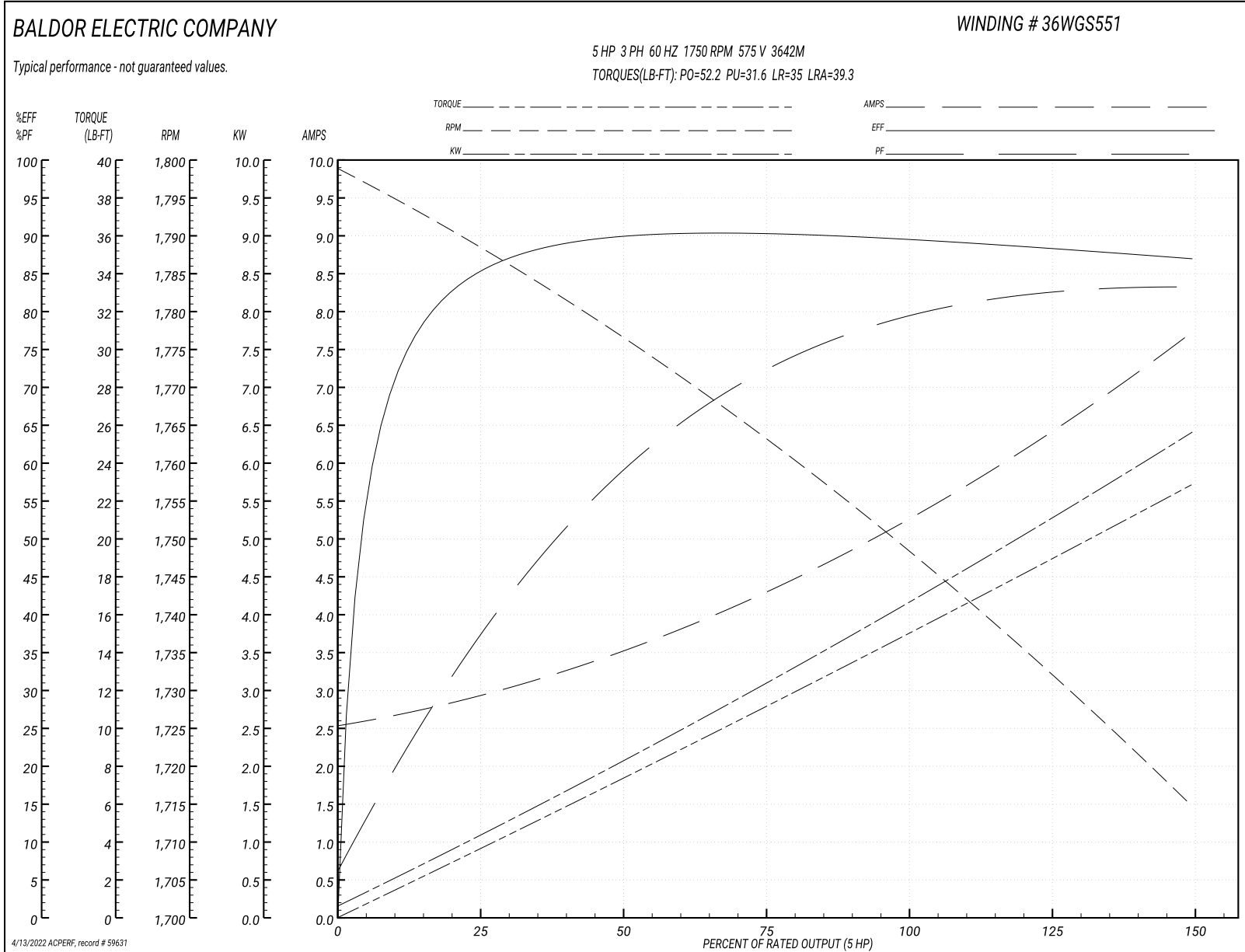
Typical performance - not guaranteed values

| <b>Winding: 36WGS551-R020</b> |                   | <b>Type: 3642M</b>         |   | <b>Enclosure: TEFC</b>       |        |
|-------------------------------|-------------------|----------------------------|---|------------------------------|--------|
| <b>Nameplate Data</b>         |                   |                            | <b>575 V, 60 Hz:<br/>Single Voltage Motor</b> |                              |        |
| <b>Rated Output (HP)</b>      | 5                 | <b>Full Load Torque</b>    | 14.9 LB-FT                                    |                              |        |
| <b>Volts</b>                  | 575               | <b>Start Configuration</b> | direct on line                                |                              |        |
| <b>Full Load Amps</b>         | 5.3               | <b>Breakdown Torque</b>    | 52.2 LB-FT                                    |                              |        |
| <b>R.P.M.</b>                 | 1750              | <b>Pull-up Torque</b>      | 31.6 LB-FT                                    |                              |        |
| <b>Hz</b>                     | 60 <b>Phase</b>   | 3                          | <b>Locked-rotor Torque</b>                    | 35 LB-FT                     |        |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b> | J                          | <b>Starting Current</b>                       | 39.3 A                       |        |
| <b>Service Factor (S.F.)</b>  | 1.15              | <b>No-load Current</b>     | 2.6 A   |                              |        |
| <b>NEMA Nom. Eff.</b>         | 89.5              | <b>Power Factor</b>        | 78  | <b>Line-line Res. @ 25°C</b> | 3.57 Ω |
| <b>Rating - Duty</b>          | 40C AMB-CONT      |                            | <b>Temp. Rise @ Rated Load</b>                | 71°C                         |        |
| <b>S.F. Amps</b>              |                   |                            | <b>Temp. Rise @ S.F. Load</b>                 | 87°C                         |        |
|                               |                   |                            | <b>Locked-rotor Power Factor</b>              | 40                           |        |
|                               |                   |                            | <b>Rotor inertia</b>                          | 0.391 LB-FT <sup>2</sup>     |        |

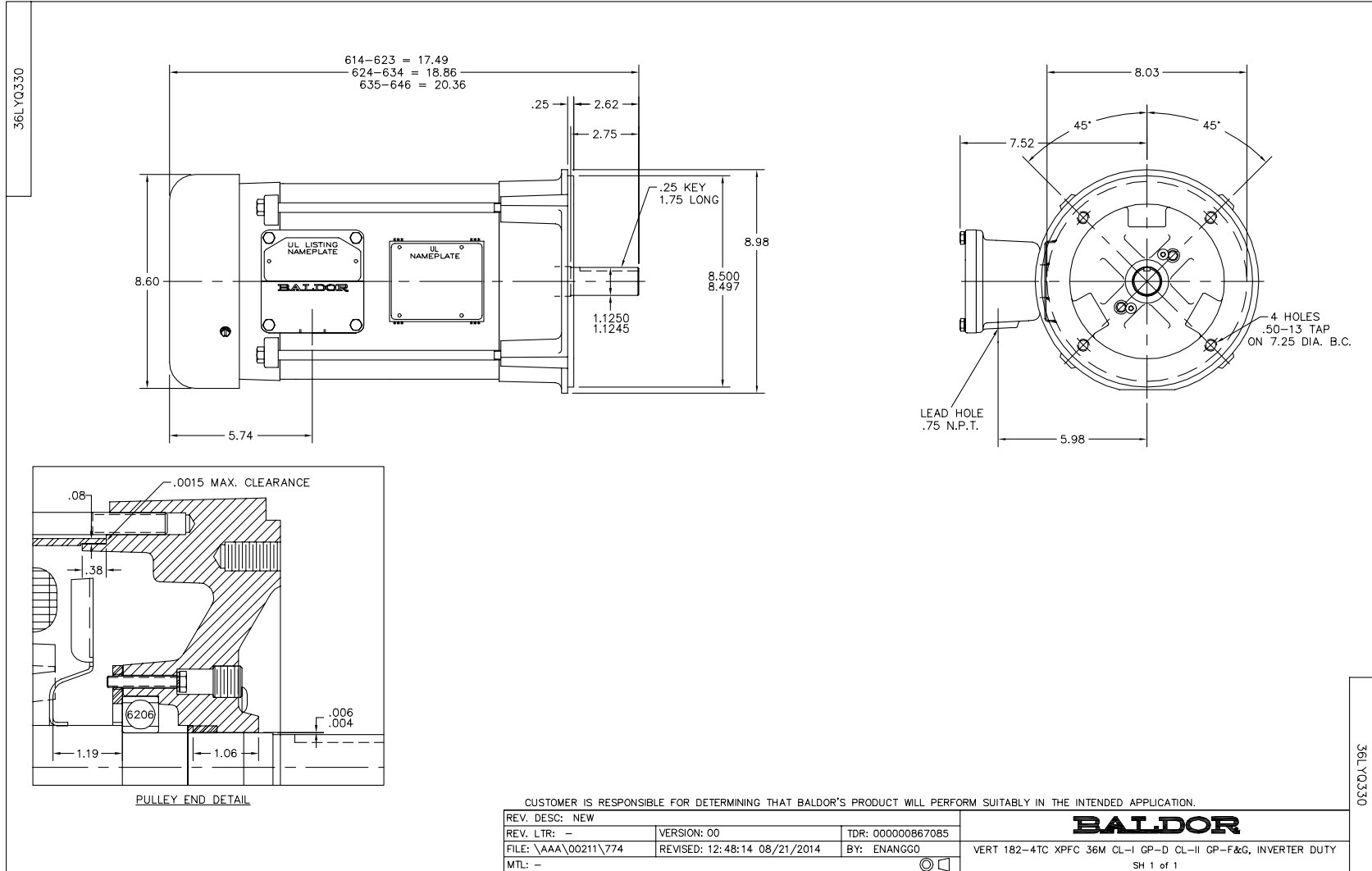
**Load Characteristics 575 V, 60 Hz, 5 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 38        | 60        | 72        | 78         | 83         | 83         | 81          |
| <b>Efficiency</b>      | 84.8      | 89.7      | 90.5      | 89.6       | 88.5       | 86.9       | 88.9        |
| <b>Speed</b>           | 1789      | 1776      | 1762      | 1750       | 1733       | 1714       | 1740        |
| <b>Line amperes</b>    | 2.85      | 3.45      | 4.35      | 5.33       | 6.36       | 7.72       | 5.95        |

Performance Graph at 575V, 60Hz, 5.0HP Typical performance - Not guaranteed values







CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

|                                   |                              |                   |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                              |                   |
| REV. LTR: E                       | VERSION: 01                  | TDR: 000001099922 |
| FILE: \AAA\00005\141              | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO       |
| MTL: -                            | © □                          |                   |

**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>