SECTION 11 48 00

COMMERCIAL DISHWASHERS

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Miele Professional; commercial grade dishwashers.
This section is based on the products of Miele Professional, which is located at:
9 Independence Way
Princeton, NJ 08540
Toll Free Tel: 866-781-5053
Tel: 609-419-9898
Fax: 609-419-4298
Email: [request info (prosales@mieleusa.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Miele+Professional&coid=46081&rep=&fax=609-419-4298&message=RE:%20Spec%20Question%20(11440mpp):%20%20&mf=)
Web: <https://www.mieleusa.com/professional/index.htm>
 [ [Click Here](https://www.arcat.com/arcatcos/cos46/arc46081.html) ] for additional information.
Miele Professional, the commercial product division of Miele Inc., provides high quality and high performance cleaning equipment, including laboratory glassware washers, laundry equipment, dishwashers and medical and dental washer-disinfectors. With Miele, no product detail is overlooked. From engineering and program design, to build quality, to performance and innovation, Miele products are tried and tested rigorously and trusted by businesses all over the world. Our objective is simply to ensure we provide systems for every need that deliver exceptional results, every day. www.miele-pro.com.

1. GENERAL
	1. SECTION INCLUDES
		1. Commercial grade dishwashers.
	2. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 26 05 00 - Common Work Results for Electrical.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* The PFD 101 U, PFD 102i and PFD 104 SCVi are Energy Star -- the other commercial dishwashers are not. Delete references from list below not required by text of edited section.

* + 1. ENERGY STAR - U.S. Environmental Protection Agency and U.S. Department of Energy, Energy Star Program.
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data: Provide manufacturer's data sheets on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + 1. USGBC LEED Submittals: Credits EA1.4 and EA9.1, Documentation that dishwashers are US EPA ENERGY STAR rated.
		2. Operation and Maintenance Data: For each type of dishwasher.
	1. QUALITY ASSURANCE

\*\* NOTE TO SPECIFIER \*\* Add qualification requirements of acceptable manufacturers. Delete if not required.

* + 1. Manufacturer Qualifications: Equipment shall be manufactured in a facility which is registered with ISO 9001 quality system.
	1. DELIVERY, STORAGE, AND HANDLING
		1. Store products in manufacturer's unopened packaging until ready for installation.
	2. WARRANTY
		1. Warranty:

\*\* NOTE TO SPECIFIER \*\* Delete type not required.

* + - 1. Commercial Use: Provide manufacturer's standard one year warranty for parts and labor.
			2. Residential Use: Provide manufacturer's standard two year warranty for parts and labor.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Miele Professional, which is located at: 9 Independence Way; Princeton, NJ 08540; Toll Free Tel: 866-781-5053; Tel: 609-419-9898; Fax: 609-419-4298; Email: [request info (prosales@mieleusa.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Miele+Professional&coid=46081&rep=&fax=609-419-4298&message=RE:%20Spec%20Question%20(11440mpp):%20%20&mf=); Web: <https://www.mieleusa.com/professional/index.htm>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
	1. DISHWASHERS

\*\* NOTE TO SPECIFIER \*\* Offices, community kitchens or nursing homes application. Fast, powerful, convenient - all attributes of the perfect dishwasher. And all properties combined in the new ProfiLine dishwashers from Miele Professional Short cycle times, high cleaning performance and ease of use. In short, perfect no-fuss dishwashing. Delete if not required.

* + 1. Dishwasher: Model PG 8056 by Miele Professional.
			1. Design Type:
				1. Under counter, integrated model. Stainless steel fascia panel, 2-wall construction for heat and noise insulation.
				2. Freestanding option available using Stand Alone Conversion Kit 1-80.
			2. Compliance:
				1. ADA Compliant.
			3. Performance Criteria:
				1. Shortest program cycle:

6 min. with water supply of 149 degrees F (65 degrees C).

Suitable for up to 40 cycles per day.

* + - 1. Basket Configuration:
				1. 1 x O 891 Upper Basket for Plates, Saucers and Cups.
				2. 1 x U 890 Lower Basket.
				3. 1 x E 810 Insert for Saucers or Small Plates.
				4. 2 x E 816 Lower Basket Insert for Plates.
				5. 2 x E 165 Cutlery Insert.
				6. Accepts up to two standard catering/restaurant baskets with optional upper and/or lower basket carriers.

O 885 Upper Basket Carrier.

U 876 Lower Basket Carrier

* + - 1. Exterior Cover:
				1. Stainless Steel (AE).
			2. Wash Technique:
				1. Fresh water-wash system, max. temperature 158 degrees F. Sanitize wash through water replacement after each wash and cleaning phase, 2 surface clean, upper basket height adjustable, circulation pump (Qmax I/min): 390.
				2. 3 compartment leach filtration: surface strainer, coarse filter, micro-fine filter and filter system in inlet. Pulsing heat drying system.
			3. Water Softener:
				1. Profi-Monobloc softener to 70 dH, usage suitable salt use (WES).
			4. Volumetric Metering:
				1. Combi-Volumetric metering unit for powder detergent and rinse aid in the door. Hook up for an external DOS G 80 Flex dosing pump for liquid detergent.
			5. Dishwasher programs and durations with adjustable hot water supply.
				1. Rapid:

Main Wash: 131 degree F (55 degrees C). 6 minutes

Final Rinse Holding time: 140 Degrees F (60 degrees C). 0.5 minute.

* + - * 1. Normal:

Main Wash: 131 degrees F (55 degrees C).

Final Rinse Holding time: 140 degrees F (60 degrees C) 1 minute.

* + - * 1. Normal Plus:

Main Wash: 131 degrees F (55 degrees C). 13 minutes.

Final Rinse Holding time: 140 degrees F (60 degrees C) 1 minute.

* + - * 1. Intensive:

Main Wash: 149 degrees F (65 degrees C). 22 minutes.

Final Rinse Holding time: 140 degrees F (60 degrees C) 1 minute.

* + - * 1. China and Crystal:

Main Wash: 122 degrees F (50 degrees C).

Final Rinse Holding time: 122 degrees F (50 degrees C). 1 minute.

* + - * 1. Glasses:

Main Wash: 122 degrees F (50 degrees C).

Final Rinse: Cold.

* + - * 1. Sanitize:

Main Wash: 151 degrees F (66 degrees C).

Final Rinse Holding time: 158 degrees F (70 degrees C). 10 minutes.

* + - * 1. Utensils:

Main Wash: 140 degrees F (60 degrees C).

Final Rinse Holding time: Cold. 1 minute.

* + - * 1. Plastics:

Main Wash: 122 degree F (50 degrees C).

Final Rinse Holding time: 140 degree F (60 degrees C). 1 minute.

* + - * 1. EnergySave:

Main Wash: 115 degree F (45 degrees C). 24 minutes.

Final Rinse Holding time: 122 degree F (50 degrees C). 2 minutes.

* + - * 1. Reactivation.
				2. Rinse.
				3. Drain.
			1. Control Mode:
				1. Stainless steel touch control, program timer display, update function, 24 hour delayed start, adjustable program parameters, add salt and rinse aid indicator, operation and fault indicators.
			2. Supplementary Equipment:
				1. Waterproof system for water overflow protection.
			3. Water Connection:
				1. 1 x cold and 1 x hot water connection, maximum 150 degrees F (65 degrees C). Male 3/4 inch GHT.
				2. Drain pump, DN 22 drain hose.

\*\* NOTE TO SPECIFIER \*\* Delete type not required.

* + - 1. Electrical Connection:
				1. PG 8056 208V Model.

Phase: 2 AC 208V 60Hz.

Fuse rating (A): 30.

Total connected load (kW): 5.8.

Plug NEMA L6-30.

Electrical Connection Convertible To:

Phase: 3 AC 208V 60Hz.

Fuse rating (A): 20.

Total connected load (kW): 5.8.

Plug: NEMA L15-30.

* + - * 1. PG 8056 240V Model.

Phase: 2 AC 240V 60Hz.

Fuse rating (A): 30.

Total connected load (kW): 5.8.

Plug NEMA L6-30.

Electrical Connection Convertible To:

Phase: 3 AC 240V 60Hz.

Fuse rating (A): 20.

Total connected load (kW): 5.8.

Plug: NEMA L15-20.

* + - 1. Dimensions/Weight:
				1. External dimensions H / W / D: 32.3 inches by 23.6 inches by 22.9 inches (820 mm by 598 mm by 580 mm).
			2. Empty Weight:
				1. 154 lb (67 kg).
			3. Noise Emission:
				1. 59 dB.

\*\* NOTE TO SPECIFIER \*\* Miele offers the only NSF/ANSI 3 ( pending) approved freshwater commercial dishwasher. Approved by the National Sanitation Foundation for use in commercial facilities. Delete if not required.

* + 1. Dishwasher: Model PG 8061 by Miele Professional.
			1. Design Type:
				1. Under counter, integrated model. Stainless steel fascia panel, 2-wall construction for heat and noise insulation.
				2. Freestanding option available using Stand Alone Conversion Kit 1-80.
			2. Compliance:
				1. ADA compliant.
			3. Approvals:
				1. NSF ANSI III approved.
			4. Performance Criteria:
				1. Shortest program cycle:

15 minutes with water supply of 149 degree F (65 degree C).

Up to 40 cycles per day.

* + - 1. Basket Configuration:
				1. 1 x O 891 Upper Basket for Plates, Saucers and Cups.
				2. 1 x U 890 Lower Basket.
				3. 1 x E 810 Insert for Saucers or Small Plates.
				4. 2 x E 816 Lower Basket Insert for Plates.
				5. 2 x E 165 Cutlery Insert.
				6. Accepts up to two standard catering/restaurant baskets with optional upper and/or lower basket carriers.

O 885 Upper Basket Carrier.

U 876 Lower Basket Carrier

* + - 1. Exterior Cover:
				1. Exterior Cover in Stainless Steel (AE).
			2. Wash Technique:
				1. Fresh water-wash system, maximum temperature 185 degrees F (85 degree C). Sanitary wash through water replacement after each wash and cleaning phase, 2 surface clean, upper basket height adjustable, circulation pump (Qmax I/min): 390.
				2. 3 Compartment leach filtration: surface strainer, coarse filter, micro-fine filter and filter system in inlet, pulsing heat drying system.
			3. Water Softener:
				1. Profi-Monobloc softener to 70dH.
			4. Volumetric Metering:
				1. Combi-Volumetric metering unit for powder detergent and rinse aid in the door. Hook up for an external DOS G 80 Flex dosing pump for liquid detergent.
			5. Dishwasher programs and durations with adjustable hot water supply.
			6. Short 151 degree F (66 degrees C). Final Rinse at 185 F (85 C).
				1. Short:

Main Wash: 151 degrees F (66 degrees C). 15 minutes.

Final Rinse Holding time:185 degrees F (85 degrees C). 1 minute.

* + - * 1. Universal:

Main Wash: 151 degrees F (66 degrees C). 26 minutes.

Final Rinse Holding time:185 degrees F (85 degrees C). 1 minute.

* + - * 1. Intensive

Main Wash: 151 degrees F (66 degrees C).

Final Rinse Holding time:185 degrees F (85 degrees C). 1 minute.

* + - * 1. Reactivation.
				2. Rinse.
				3. Drain.
			1. Control Mode:
				1. Stainless steel touch panel, program timer display, update function, 24 hour delayed start, time selector, adjustable program parameters, add salt and rinse aid indicator, operation and fault indicators.
			2. Supplementary Equipment:
				1. Steam condenser; waterproof system for water overflow protection.
			3. Water Connection:
				1. 2 cold, 3/4 inch GHT (If only 1 cold water connection is available use included Y- adapter).
				2. 1 hot water connection, max. 150 degrees F (65 degrees C).
				3. Drain pump, water drainage DN 22.

\*\* NOTE TO SPECIFIER \*\* Delete type not required.

* + - 1. Electrical Connection:
				1. PG 8061 208V Model.

Phase: 3 AC 208V 60Hz.

Fuse rating (A): 20.

Total connected load (kW): 5.8.

Plug: NEMA L 15-20.

Electrical Connection Convertible To:

Phase: 2 AC 208V 60Hz.

Fuse rating (A): 30.

Total connected load (kW): 5.8.

Plug: NEMA L 6-30.

* + - * 1. PG 8061 240V Model.

Phase: 3 AC 240V 60Hz.

Fuse rating (A): 20.

Total connected load (kW): 5.8.

Plug: NEMA L 15-20.

Electrical Connection Convertible To:

Phase: 2 AC 240V 60Hz.

Fuse rating (A): 30.

Total connected load (kW): 5.8.

Plug: NEMA L6-30.

* + - 1. Dimensions/Weight:
				1. External dimensions H / W / D: 32.9 inches by 23.6 inches by 23.5 inches (820 mm by 598 mm by 595 mm).
			2. Empty Weight:
				1. 160 lb (73 kg).
			3. Noise Emission:
				1. 57 dB.
		1. Dishwasher: ProfiLine Model PFD 101U (120V) by Miele Professional. Built-under dishwasher for large loads of dishware in households, offices, and utility areas.
			1. Test Certificates and Symbols: CE, Complies with Machinery Directive 2006/4 2/EC, VDE, EMC radio suppressed, EN 1717, UL.
			2. Compliance:
				1. ADA Compliant.
			3. Model and Design:
				1. Wash System: Fresh water.
				2. Number of Levels: 2.
				3. Front: Stainless steel.
				4. Side Walls: Galvanized.
				5. Drying: AutoOpen assisted drying. Extra drying. Active condensation drying.
			4. Performance Data:
				1. Tested Virucidal Efficacy: Effective against viruses.
				2. Circulation Pump, Qmax: 19.81 gpm (75 l per m).
				3. Shortest Program Duration: 52 minutes.
				4. Maximum Final Rinse Temperature: 180 degrees F (82 degrees C).
				5. Cleaning Performance, Place Settings per Cycle: 13.
				6. Service Life in Wash Cycles: 12,500.
			5. Features:
				1. Commercial-grade electrical connection.
				2. One Combi dispenser/door for powder and liquid media.
				3. Wash cabinet made from high-quality stainless steel.
				4. AutoOpen assisted drying.
				5. AutoClose.
				6. EcoFeedback.
				7. Perfect GlassCare.
				8. Child lock.
				9. Adjustable final rinse temperature.
				10. Optical interface.
				11. SmartStart.
				12. FlexiTimer with EcoStart.

\*\* NOTE TO SPECIFIER \*\* Optional. delete if not required.

* + - * 1. External dispensing module for liquid cleaning agent.
			1. Controls:
				1. Control System: Electronic controls.
				2. Program Selection: Program Selector Buttons.
				3. Delay Start: 24 hours.
				4. Countdown indicator.
				5. Program sequence indicator.
				6. Check filter indicator.
				7. Choice of display language.
			2. Standard Electrical Connection:
				1. Electrical Connection: AC 120 V 60 HZ.
				2. Heater Rating: 1.30 kW.
				3. Total Connected Load: 1.40 kW.
				4. Fuse Rating: 15 A.
				5. Length of Power Cord: 5 ft (1.70 m).
				6. Possible Voltage Variant:

Electrical Connection: 2N AC 120/208-240 V, 60 HZ.

Heater Rating: 3.5 to 3.8 kW.

Total Connected Load: 3.70 to 4.00 kW.

Fuse Rating: 30 A.

* + - 1. Water Connection and Drainage:
				1. Cold or Hot Water: 1.
				2. Required Flow Pressure: 0.30 to 10.00 bars.
				3. Drain Hose: 22 DN.
				4. Maximum Delivery Head for Drain Pump: 39-3/8 inches (100 cm).
				5. Integrated Water Softener.
				6. Maximum Water Hardness: 6.50 mmol per l.
				7. Water Protection System: Waterproof system.
				8. Length of Water Inlet Hose in inches: 59-1/8 inches (150 mm).
				9. Length of Water Drain Hose in inches: 59-1/8 inches (150 mm).
			2. Dimensions and Weight:
				1. External Dimensions:

Net Height: 31-3/4 inches (805 mm).

Net Width: 23-5/8 inches (598 mm).

Net Depth: 22-1/2 inches (570 mm).

Gross Height: 37-7/8 inches (960 mm).

Gross Width: 26-1/2 inches (670 mm).

Gross Depth: 27-5/8 inches (700 mm).

* + - * 1. Usable Space in Wash Cabinet:

Height: 21-3/8 inches (540 mm).

Width: 20-1/8 inches (510 mm).

Depth of Upper Basket: 17-3/4 inches (450 mm).

Depth of Lower Basket: 17-3/4 inches (450 mm).

* + - * 1. In-Feed Height Above Floor: 8-3/8 inches (210 mm).
				2. Net Weight: 98 lbs (44 kg).
				3. Gross Weight: 113 lbs (51 kg).
				4. Maximum Floor Loading: 1,000 lbsf.
			1. Emission levels: Sound power (LwA) in dB(A) re 1 pW: 48.0
			2. Programs:
				1. Universal.
				2. Short/QuickIntenseWash.
				3. SaniWash.
				4. Cold, Pre-Rinse, Rinse and Hold.
				5. Glasses.
				6. Plastic.
				7. EnergySave, Economy.
				8. Intensive.
			3. Basket Design:
				1. ExtraComfort baskets.
				2. Flexible FlexLine Baskets.
				3. FlexCare Glass Holder: 2.
				4. FlexCare Cup Rack: 1.
				5. Cutlery basket.
				6. Height-adjustable upper basket.
		1. Dishwasher: ProfiLine Model PFD 102i (120 V0) by Miele Professional. Semi-Integrated dishwasher for large loads of dishware in households, offices, and utility areas.
			1. Test Certificates and Symbols: CE, Complies with Machinery Directive 2006/4 2/EC, VDE, EMC radio suppressed, EN 1717, and UL.
			2. Compliance:
				1. ADA Compliant.
			3. Model and Design:
				1. Wash System: Fresh water.
				2. Number of Levels: 2
				3. Front: Without front.
				4. Side Walls: Galvanized.
				5. Drying: AutoOpen assisted drying. Extra drying. Active condensation drying.
				6. Minimum Front Panel Weight: 9 lbs (4 kg).
				7. Maximum Front Panel Weight: 25 lbs (11 kg).
			4. Performance Data:
				1. Tested Virucidal Efficacy: Effective against viruses.
				2. Circulation Pump, Qmax: 19.81 gpm (75 l per m).
				3. Shortest Program Duration: 52 minutes.
				4. Maximum Final Rinse Temperature: 180 degrees F (82 degrees C).
				5. Cleaning Performance, Place Settings per Cycle: 13
				6. Service Life in Wash Cycles: 12,500.
			5. Features:
				1. Commercial-grade electrical connection.
				2. One Combi dispenser/door for powder and liquid media.
				3. Wash cabinet made from high-quality stainless steel.
				4. LED Lighting.
				5. AutoOpen assisted drying.
				6. AutoClose.
				7. EcoFeedback.
				8. Perfect GlassCare.
				9. Child lock.
				10. Adjustable final rinse temperature.
				11. Optical interface.
				12. SmartStart.
				13. FlexiTimer with EcoStart.

\*\* NOTE TO SPECIFIER \*\* Optional. delete if not required.

* + - * 1. External dispensing module for liquid cleaning agent.
			1. Controls:
				1. Control System: Electronic controls.
				2. Program Selection: Program Selector Buttons.
				3. Delay Start: 24 hours.
				4. Countdown indicator.
				5. Program sequence indicator.
				6. Check filter indicator.
				7. Choice of display language.
			2. Standard Electrical Connection:
				1. Electrical Connection: AC 120 V 60 HZ.
				2. Heater Rating: 1.30 kW.
				3. Total Connected Load: 1.40 kW.
				4. Fuse Rating: 15 A.
				5. Length of Power Cord: 5 ft (1.70 m).
				6. Possible Voltage Variant:

Electrical Connection: 2N AC 120/208-240V, 60HZ.

Heater Rating: 3.5 to 3.8 kW.

Total Connected Load: 3.70 to 4.00 kW.

Fuse Rating: 30 A.

* + - 1. Water Connection and Drainage:
				1. Cold or Hot Water: 1.
				2. Required Flow Pressure: 0.30 to 10.00 bars.
				3. Drain Hose: 22 DN.
				4. Maximum Delivery Head for Drain Pump: 39-3/8 inches (100 cm).
				5. Integrated Water Softener.
				6. Maximum Water Hardness: 6.50 mmol per l.
				7. Water Protection System: Waterproof system.
				8. Length of Water Inlet Hose in inches: 59-1/8 inches (150 mm).
				9. Length of Water Drain Hose in inches: 59-1/8 inches (150 mm).
			2. Dimensions and Weight:
				1. External Dimensions:

Net Height: 31-3/4 inches (805 mm).

Net Width: 23-5/8 inches (598 mm).

Net Depth: 22-1/2 inches (570 mm).

Gross Height: 37-7/8 inches (960 mm).

Gross Width: 26-1/2 inches (670 mm).

Gross Depth: 27-5/8 inches (700 mm).

* + - * 1. Usable Space in Wash Cabinet:

Height: 21-3/8 inches (540 mm).

Width: 20-1/8 inches (510 mm).

Depth of Upper Basket: 17-3/4 inches (450 mm).

Depth of Lower Basket: 17-3/4 inches (450 mm).

* + - * 1. In-Feed Height Above Floor: 8-3/8 inches (210 mm).
				2. Net Weight: 93 lbs (42 kg).
				3. Gross Weight: 109 lbs (49 kg).
				4. Maximum Floor Loading: 1,000 lbsf.
			1. Emission levels: Sound power (LwA) in dB(A) re 1 pW: 48.0.
			2. Programs:
				1. Universal.
				2. Short/QuickIntenseWash.
				3. SaniWash.
				4. Cold, Pre-Rinse, Rinse and Hold.
				5. Glasses.
				6. Plastic.
				7. EnergySave, Economy.
				8. Intensive.
			3. Basket Design:
				1. ExtraComfort baskets.
				2. Flexible FlexLine Baskets.
				3. FlexCare Glass Holder: 2.
				4. FlexCare Cup Rack: 1.
				5. Cutlery basket.
				6. Height-adjustable upper basket.
		1. Dishwasher: ProfiLine Model PFD 102i (120/208-240 V) by Miele Professional. Integrated dishwasher for large loads of dishware in households, offices and utility areas.
			1. Test certificates and symbols: CE, Complies with Machinery Directive 2006/4 2/EC, VDE, EMC radio suppressed, EN 1717, and UL.
			2. Model and Design:
				1. Wash System: Fresh water.
				2. Number of Levels: 2.
				3. Front: Without front.
				4. Side Walls: Galvanized.
				5. Drying: AutoOpen assisted drying. Extra drying. Active condensation drying.
				6. Minimum Front Panel Weight: 9 lbs (4 kg).
				7. Maximum Front Panel Weight: 25 lbs (11 kg).
			3. Performance Data:
				1. Tested Virucidal Efficacy: Effective against viruses.
				2. Circulation Pump, Qmax: 19.81 gpm (75 l per m).
				3. Shortest Program Duration: 52 minutes.
				4. Maximum Final Rinse Temperature: 180 degrees F (82 degrees C).
				5. Cleaning Performance, Place Settings per Cycle: 13.
				6. Service Life in Wash Cycles: 12,500.
			4. Features
				1. Commercial-grade electrical connection.
				2. 1 Combi dispenser/door for powder and liquid media.
				3. Wash cabinet made from high-quality stainless steel.
				4. LED Lighting.
				5. AutoOpen assisted drying.
				6. AutoClose.
				7. EcoFeedback.
				8. Perfect GlassCare.
				9. Child lock.
				10. Adjustable final rinse temperature.
				11. Optical interface.
				12. SmartStart.
				13. FlexiTimer with EcoStart.

\*\* NOTE TO SPECIFIER \*\* Optional. delete if not required.

* + - * 1. External dispensing module for liquid cleaning agent.
			1. Controls:
				1. Control System: Electronic controls.
				2. Program Selection: Program Selector Buttons.
				3. Delay Start: 24 hours.
				4. Countdown indicator.
				5. Program sequence indicator.
				6. Check filter indicator.
				7. Choice of display language.
			2. Standard Electrical Connection:
				1. Electrical Connection: 2N AC 120/208-240V, 60HZ.
				2. Heater Rating: 3.50 to 3.80 kW.
				3. Total Connected Load: 3.70 to 4.00 kW.
				4. Fuse Rating: 30 A.
				5. Length of Power Cord: 5 ft (1.70 m).
				6. Possible Voltage Variant:

Electrical Connection: AC 120 V 60 HZ.

Heater Rating: 1.3 kW.

Total Connected Load: 1.40 kW.

Fuse Rating: 15 A.

* + - 1. Water Connection and Drainage:
				1. Cold or Hot Water: 1.
				2. Required Flow Pressure: 0.30 to 10.00 bars.
				3. Drain Hose: 22 DN.
				4. Maximum Delivery Head for Drain Pump: 39-3/8 inches (100 cm).
				5. Integrated Water Softener.
				6. Maximum Water Hardness: 6.50 mmol per l).
				7. Water Protection System: Waterproof system.
				8. Length of Water Inlet Hose in inches: 59-1/8 inches (150 mm).
				9. Length of Water Drain Hose in inches: 59-1/8 inches (150 mm).
			2. Dimensions and Weight:
				1. External Dimensions:

Net Height: 31-3/4 inches (805 mm).

Net Width: 23-5/8 inches (598 mm).

Net Depth: 22-1/2 inches (570 mm).

Gross Height: 37-7/8 inches (960 mm).

Gross Width: 26-1/2 inches (670 mm).

Gross Depth: 27-5/8 inches (700 mm).

* + - * 1. Usable Space in Wash Cabinet:

Height: 21-3/8 inches (540 mm).

Width: 20-1/8 inches (510 mm).

Depth of Upper Basket: 17-3/4 inches (450 mm).

Depth of Lower Basket: 17-3/4 inches (450 mm).

* + - * 1. In-Feed Height Above Floor: 8-3/8 inches (210 mm).
				2. Net Weight: 93 lbs (42 kg).
				3. Gross Weight: 109 lbs (49 kg).
				4. Maximum Floor Loading: 1,000 lbsf.
			1. Emission Levels: Sound power (LwA) in dB(A) re 1 pW: 48.0.
			2. Programs:
				1. Universal.
				2. Short/QuickIntenseWash.
				3. SaniWash.
				4. Cold/pre-rinse/Rinse&Hold.
				5. Glasses.
				6. Plastic.
				7. EnergySave/Economy.
				8. Intensive.
			3. Basket Design:
				1. ExtraComfort baskets.
				2. Flexible FlexLine Baskets.
				3. FlexCare Glass Holder: 2.
				4. FlexCare Cup Rack: 1.
				5. Cutlery basket.
				6. Height-adjustable upper basket.
		1. Dishwasher: ProfiLine Model PFD 104 SCVi XXL (120V) by Miele Professional. Fully integrated Full-sizedishwasher with 3D MultiFlex cutlery tray for large loads of dishware in households, offices and utility areas.
			1. Test certificates and symbols: CE, Complies with Machinery Directive 2006/4 2/EC, VDE, EMC radio suppressed, EN 1717, UL.
			2. Model and Design:
				1. Wash System: Fresh water.
				2. Number of Levels: 3.
				3. Front: Without front.
				4. Side Walls: Galvanized.
				5. Drying: AutoOpen assisted drying. Extra drying. Active condensation drying.
				6. Minimum Front Panel Weight: 12 lbs (5 kg).
				7. Maximum Front Panel Weight: 27 lbs (12 kg).
			3. Performance Data:
				1. Tested Virucidal Efficacy: Effective against viruses.
				2. Circulation Pump, Qmax: 19.81 gpm (75 l per m).
				3. Shortest Program Duration: 52 minutes.
				4. Maximum Final Rinse Temperature: 180 degrees F (82 degrees C).
				5. Cleaning Performance, Place Settings per Cycle: 16.
				6. Service Life in Wash Cycles: 12,500.
			4. Features:
				1. Commercial-grade electrical connection.
				2. One Combi dispenser/door for powder and liquid media.
				3. Wash cabinet made from high-quality stainless steel.
				4. LED Lighting.
				5. Knock2open.
				6. AutoOpen assisted drying.
				7. AutoClose.
				8. EcoFeedback.
				9. Perfect GlassCare.
				10. Adjustable final rinse temperature.
				11. Optical interface.
				12. SmartStart.
				13. FlexiTimer with EcoStart.

\*\* NOTE TO SPECIFIER \*\* Optional. Delete if not required.

* + - * 1. External dispensing module for liquid cleaning agent.
			1. Controls:
				1. Control System: Electronic controls.
				2. Program Selection: Program Selector Buttons.
				3. Delay Start: 24 hours.
				4. Countdown indicator.
				5. Program sequence indicator.
				6. Check filter indicator.
				7. Choice of display language.
			2. Standard Electrical Connection:
				1. Electrical Connection: AC 120 V 60 HZ.
				2. Heater Rating: 1.30 kW.
				3. Total Connected Load: 1.40 kW.
				4. Fuse Rating: 15 A.
				5. Length of Power Cord: 5 ft (1.70 m).
				6. Possible Voltage Variant:

Electrical Connection: 2N AC 120/208-240 V, 60 HZ.

Heater Rating: 3.5 to 3.8 kW.

Total Connected Load: 3.70 to 4.00 kW.

Fuse Rating: 30 A.

* + - 1. Water Connection and Drainage:
				1. Cold or Hot Water: 1.
				2. Required Flow Pressure: 0.30 to 10.00 bars.
				3. Drain Hose: 22 DN.
				4. Maximum Delivery Head for Drain Pump: 39-3/8 inches (100 cm).
				5. Integrated Water Softener.
				6. Maximum Water Hardness: 6.50 mmol per l.
				7. Water Protection System: Waterproof system.
				8. Length of Water Inlet Hose in inches: 59-1/8 inches (150 mm).
				9. Length of Water Drain Hose in inches: 59-1/8 inches (150 mm).
			2. Dimensions and Weight:
				1. External Dimensions:

Net Height: 33-3/8 inches (845 mm).

Net Width: 23-5/8 inches (598 mm).

Net Depth: 22-1/2 inches (570 mm).

Gross Height: 37-7/8 inches (960 mm).

Gross Width: 26-1/2 inches (670 mm).

Gross Depth: 27-5/8 inches (700 mm).

* + - * 1. Usable Space in Wash Cabinet:

Height: 22-7/8 inches (580 mm).

Width: 20-1/8 inches (510 mm).

Depth of Upper Basket: 17-3/4 inches (450 mm).

Depth of Lower Basket: 17-3/4 inches (450 mm).

* + - * 1. In-Feed Height Above Floor: 8-3/8 inches (210 mm).
				2. Net Weight: 113 lbs (51 kg).
				3. Gross Weight: 128 lbs (58 kg).
				4. Maximum Floor Loading: 1,000 lbsf.
			1. Emission Levels: Sound power (LwA) in dB(A) re 1 pW: 45.0.
			2. Programs:
				1. Universal.
				2. Short/QuickIntenseWash.
				3. SaniWash.
				4. Cold/pre-rinse/Rinse&Hold.
				5. Glasses.
				6. Plastic.
				7. EnergySave/Economy.
				8. Intensive.
			3. Basket Design:
				1. MaxiComfort baskets.
				2. Flexible FlexLine Baskets.
				3. FlexCare Glass Holder: 4.
				4. FlexCare Cup Rack: 2.
				5. Height-adjustable upper basket.
				6. Patented 3D MultiFlex Tray.
		1. Dishwasher: ProfiLine Model PFD 104 SCVi XXL (120/208-240V) by Miele Professional. Fully integrated Full-sizedishwasher with 3D MultiFlex cutlery tray for large loads of dishware in households, offices and utility areas.
			1. Test certificates and symbols: CE, Complies with Machinery Directive 2006/4 2/EC, VDE, EMC radio suppressed, EN 1717, UL.
			2. Model and Design:
				1. Wash System: Fresh water.
				2. Number of Levels: 3.
				3. Front: Without front.
				4. Side Walls: Galvanized.
				5. Drying: AutoOpen assisted drying. Extra drying. Active condensation drying.
				6. Minimum Front Panel Weight: 12 lbs (5 kg).
				7. Maximum Front Panel Weight: 27 lbs (12 kg).
			3. Performance Data:
				1. Tested Virucidal Efficacy: Effective against viruses.
				2. Circulation Pump, Qmax: 19.81 gpm (75 l per m).
				3. Shortest Program Duration: 52 minutes.
				4. Maximum Final Rinse Temperature: 180 degrees F (82 degrees C).
				5. Cleaning Performance, Place Settings per Cycle: 16.
				6. Service Life in Wash Cycles: 12,500.
			4. Features
				1. Commercial-grade electrical connection.
				2. One Combi dispenser/door for powder and liquid media.
				3. Wash cabinet made from high-quality stainless steel.
				4. LED Lighting.
				5. Knock2open.
				6. AutoOpen assisted drying.
				7. AutoClose.
				8. EcoFeedback.
				9. Perfect GlassCare.
				10. Adjustable final rinse temperature.
				11. Optical interface.
				12. SmartStart.
				13. FlexiTimer with EcoStart.

\*\* NOTE TO SPECIFIER \*\* Optional. Delete if not required.

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			1. Controls:
				1. Control System: Electronic controls.
				2. Program Selection: Program Selector Buttons.
				3. Delay Start: 24 hours.
				4. Countdown indicator.
				5. Program sequence indicator.
				6. Check filter indicator.
				7. Choice of display language.
			2. Standard Electrical Connection:
				1. Electrical Connection: 2N AC 120/208-240 V, 60 HZ.
				2. Heater Rating: 3.50 to 3.80 kW.
				3. Total Connected Load: 3.70 to 4.00 kW.
				4. Fuse Rating: 30 A.
				5. Length of Power Cord: 5 ft (1.70 m).
				6. Possible Voltage Variant:

Electrical Connection: AC 120 V 60 HZ.

Heater Rating: 1.3 kW.

Total Connected Load: 1.40 kW.

Fuse Rating: 15 A.

* + - 1. Water Connection and Drainage:
				1. Cold or Hot Water: 1.
				2. Required Flow Pressure: 0.30 to 10.00 bars.
				3. Drain Hose: 22 DN.
				4. Maximum Delivery Head for Drain Pump: 39-3/8 inches (100 cm).
				5. Integrated Water Softener.
				6. Maximum Water Hardness: 6.50 mmol per l).
				7. Water Protection System: Waterproof system.
				8. Length of Water Inlet Hose in inches: 59-1/8 inches (150 mm).
				9. Length of Water Drain Hose in inches: 59-1/8 inches (150 mm).
			2. Dimensions and Weight:
				1. External Dimensions:

Net Height: 33-3/8 inches (845 mm).

Net Width: 23-5/8 inches (598 mm).

Net Depth: 22-1/2 inches (570 mm).

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* + - * 1. In-Feed Height Above Floor: 8-3/8 inches (210 mm).
				2. Net Weight: 113 lbs (51 kg).
				3. Gross Weight: 128 lbs (58 kg).
				4. Maximum Floor Loading: 1,000 lbsf.
			1. Emission levels: Sound power (LwA) in dB(A) re 1 pW: 45.0.
			2. Programs:
				1. Universal.
				2. Short/QuickIntenseWash.
				3. SaniWash.
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			3. Basket Design:
				1. MaxiComfort baskets.
				2. Flexible FlexLine Baskets.
				3. FlexCare Glass Holder: 4.
				4. FlexCare Cup Rack: 2.
				5. Height-adjustable upper basket.
				6. Patented 3D MultiFlex Tray.
	1. BASKETS AND STANDS
		1. Standard Baskets: Provide baskets as designed and provided for dishwasher model selected.

\*\* NOTE TO SPECIFIER \*\* Miele offers a number of accessory basket and inserts as well as stands to fit the dishwasher. The units come with standard baskets -. Schedule below or on drawings. Delete if not required.

* + 1. Accessory Baskets and Stands: Provide as scheduled or required in addition to baskets provided with dishwasher model selected.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until rough-in provisions have been properly prepared.
		2. If rough-in preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer in printed installation instructions for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions. Install in proper relationship to adjacent materials.
	4. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION