



## TECHNICAL DATA

## VFR-500 Wiring Diagrams

### 1. DESCRIPTION

This document summarizes some of the applicable programs and associated drawings for the Viking VFR-500 Panel. Click the program number in Column 1 or 2 to download the applicable diagram (drawing or PDF). For additional information, please contact Viking.

### 2. CONTACT

The VFR-500 is available through Viking distributors only. Contact your local Viking sales office which can be found on our website: [www.vikinggroupinc.com/locations](http://www.vikinggroupinc.com/locations)

#### The Viking Corporation

5150 Beltway SE  
Caledonia, MI 49316  
Tel.: (800) 968-9501  
Fax: 269-818-1680  
Technical Services: 1-877-384-5464  
[techsvcs@vikingcorp.com](mailto:techsvcs@vikingcorp.com)

### 3. VFR-500 PROGRAM DRAWINGS

The following program numbers can be clicked to view the program wire diagram in CAD or as a PDF.

| DWG Program Number | PDF Program Number | Description                                                                                                                                                                                                                                                                                                                                                             |
|--------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">1</a>  | <a href="#">1</a>  | 1 Sprinkler System <ul style="list-style-type: none"> <li>• Single Interlocked Preaction System with Electric Release</li> <li>• Deluge System with Electric Release</li> <li>• Non-Interlocked Preaction System with Electric Release</li> <li>• Double Interlocked Preaction System with Electric/Pneumatic Release</li> </ul>                                        |
| <a href="#">2</a>  | <a href="#">2</a>  | 2 Sprinkler Systems Operating independently of each other <ul style="list-style-type: none"> <li>• Single Interlocked Preaction System with Electric Release</li> <li>• Deluge System with Electric Release</li> <li>• Non-Interlocked Preaction System with Electric Release</li> <li>• Double Interlocked Preaction System with Electric/Pneumatic Release</li> </ul> |
| <a href="#">3</a>  | <a href="#">3</a>  | 1 Sprinkler System <ul style="list-style-type: none"> <li>• Double Interlocked Preaction System with Electric/Pneu-Lectric Release</li> </ul>                                                                                                                                                                                                                           |
| <a href="#">4</a>  | <a href="#">4</a>  | 2 Sprinkler Systems - Operating Simultaneously <ul style="list-style-type: none"> <li>• Single Interlocked Preaction System with Electric Release</li> <li>• Deluge System with Electric Release</li> <li>• Non-Interlocked Preaction System with Electric Release</li> <li>• Double Interlocked Preaction System with Electric/Pneumatic Release</li> </ul>            |


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| DWG Program Number        | PDF Program Number        | Description                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>5</u></a>  | <a href="#"><u>5</u></a>  | 1 Sprinkler System - NYC Special <ul style="list-style-type: none"> <li>• Single Interlocked Preaction System with Electric Release</li> <li>• Deluge System with Electric Release</li> <li>• Non-Interlocked Preaction System with Electric Release</li> <li>• Double Interlocked Preaction System with Electric/Pneumatic Release</li> </ul>    |
| <a href="#"><u>6</u></a>  | <a href="#"><u>6</u></a>  | 1 Sprinkler System <ul style="list-style-type: none"> <li>• FIRECYCLE III Single Interlocked Preaction Multicycle System</li> <li>• FIRECYCLE III Single Interlocked Preaction Multicycle System - NYC Special</li> </ul>                                                                                                                         |
| <a href="#"><u>7</u></a>  | <a href="#"><u>7</u></a>  | 1 Sprinkler System <ul style="list-style-type: none"> <li>• FIRECYCLE III Double Interlocked Preaction Multicycle System</li> <li>• FIRECYCLE III Double Interlocked Preaction Multicycle System - NYC Special</li> </ul>                                                                                                                         |
| <a href="#"><u>8</u></a>  | <a href="#"><u>8</u></a>  | 1 Sprinkler System <ul style="list-style-type: none"> <li>• FIRECYCLE III Deluge Multicycle System</li> </ul>                                                                                                                                                                                                                                     |
| <a href="#"><u>9</u></a>  | <a href="#"><u>9</u></a>  | 1 Sprinkler System <ul style="list-style-type: none"> <li>• FIRECYCLE III Wet Multicycle System</li> </ul>                                                                                                                                                                                                                                        |
| <a href="#"><u>10</u></a> | <a href="#"><u>10</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>• SUREFIRE Single Interlocked Preaction System</li> <li>• SUREFIRE Single Interlocked Preaction System - NYC Special</li> <li>• SUREFIRE Single Interlocked Preprimed Preaction System</li> <li>• SUREFIRE Single Interlocked Preprimed Preaction System - NYC Special</li> </ul>       |
| <a href="#"><u>11</u></a> | <a href="#"><u>11</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>• SUREFIRE Double Interlocked Preaction System</li> <li>• SUREFIRE Double Interlocked Preaction System - NYC Special</li> <li>• SUREFIRE Double Interlocked Preprimed Preaction System</li> <li>• SUREFIRE Double Interlocked Preprimed Preaction System - NYC Special</li> </ul>       |
| <a href="#"><u>12</u></a> | <a href="#"><u>12</u></a> | 1 Sprinkler System - Cross Zoned <ul style="list-style-type: none"> <li>• Single Interlocked Preaction System with Electric Release</li> <li>• Deluge System with Electric Release</li> <li>• Non-Interlocked Preaction System with Electric Release</li> <li>• Double Interlocked Preaction System with Electric/Pneu-Lectric Release</li> </ul> |
| <a href="#"><u>13</u></a> | <a href="#"><u>13</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>• E-1 Single Interlocked Preaction System with Electric/Pneumatic Release</li> </ul>                                                                                                                                                                                                    |
| <a href="#"><u>14</u></a> | <a href="#"><u>14</u></a> | 1 Sprinkler System - Cross Zoned <ul style="list-style-type: none"> <li>• E-1 Single Interlocked Preaction System with Electric/Pneumatic Release</li> </ul>                                                                                                                                                                                      |
| <a href="#"><u>15</u></a> | <a href="#"><u>15</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>• E-1 Single Interlocked Surefire Preaction System with Electric/Pneumatic Release</li> </ul>                                                                                                                                                                                           |



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| DWG Program Number        | PDF Program Number        | Description                                                                                                                                                                                                                                                                                                              |
|---------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>16</u></a> | <a href="#"><u>16</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>E-1 Single Interlocked Firecycle III Preaction System with Electric/Pneumatic Release</li> </ul>                                                                                                                                                               |
| <a href="#"><u>17</u></a> | <a href="#"><u>17</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>Double Interlocked Preaction System with Electric/Pneu-Lectric Release</li> </ul>                                                                                                                                                                              |
| <a href="#"><u>18</u></a> | <a href="#"><u>18</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>Single Interlocked Preaction System with Electric Release</li> <li>Deluge System with Electric Release</li> <li>Non-Interlocked Preaction System with Electric Release</li> <li>Double Interlocked Preaction System with Electric/Pneumatic Release</li> </ul> |
| <a href="#"><u>19</u></a> | <a href="#"><u>19</u></a> | 1 Sprinkler System <ul style="list-style-type: none"> <li>Single Interlocked Preaction System with Electric Release</li> <li>Deluge System with Electric Release</li> <li>Non-Interlocked Preaction System with Electric Release</li> <li>Double Interlocked Preaction System with Electric/Pneumatic Release</li> </ul> |
| <a href="#"><u>20</u></a> | <a href="#"><u>20</u></a> | 1 Sprinkler System - Dual Hazard, 2 Detection Zones, Cross Zoned <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                              |
| <a href="#"><u>21</u></a> | <a href="#"><u>21</u></a> | 1 Sprinkler System - Dual Hazard, 2 Detection Zones <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                                           |
| <a href="#"><u>22</u></a> | <a href="#"><u>22</u></a> | 1 Sprinkler System - Single Hazard, 2 Detection Zones, Cross Zoned <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                            |
| <a href="#"><u>23</u></a> | <a href="#"><u>23</u></a> | 1 Sprinkler System - Single Hazard, 4 Detection Zones <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                                         |
| <a href="#"><u>24</u></a> | <a href="#"><u>24</u></a> | 1 Sprinkler System - Single Hazard, 2 Detection Zones <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                                         |
| <a href="#"><u>28</u></a> | <a href="#"><u>28</u></a> | 1 Sprinkler System - 4 Alarm Zones <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                                                            |
| <a href="#"><u>29</u></a> | <a href="#"><u>29</u></a> | 1 Sprinkler System - Single Hazard, 2 Detection Zones, Cross Zoned <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                            |
| <a href="#"><u>30</u></a> | <a href="#"><u>30</u></a> | 1 Sprinkler System - Failsafe Cross Zoned (NO/NC Solenoids) <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                                   |
| <a href="#"><u>31</u></a> | <a href="#"><u>31</u></a> | 1 Sprinkler System - Failsafe Single Zoned <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                                                    |
| <a href="#"><u>32</u></a> | <a href="#"><u>32</u></a> | 1 Sprinkler System - Double Interlock, Cross Zoned <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                                                            |
| <a href="#"><u>33</u></a> | <a href="#"><u>33</u></a> | 1 Sprinkler System - Redundant Solenoids Single Interlock, Single Zone                                                                                                                                                                                                                                                   |
| <a href="#"><u>34</u></a> | <a href="#"><u>34</u></a> | 1 Sprinkler System - Single Zone, Latching Solenoid                                                                                                                                                                                                                                                                      |
| <a href="#"><u>35</u></a> | <a href="#"><u>35</u></a> | 1 Sprinkler System - Latching Solenoid, Cross Zoned                                                                                                                                                                                                                                                                      |
| <a href="#"><u>36</u></a> | <a href="#"><u>36</u></a> | 2 Sprinkler Systems - Dry System & Double Interlock Preaction System, Dual EA-1 <ul style="list-style-type: none"> <li>Conventional Input Zones</li> </ul>                                                                                                                                                               |