

# Thermo™-Expansion Valves Series TIH-FLR

TIH: Quick Selection (included 1.5 bar pressure drop for liquid line components and distributor)

| Condensing temperature (°C) | R290 Capacity (kW)           |      |      |      |      |      |      |      |      |      |      |           | R290      | Valve type |
|-----------------------------|------------------------------|------|------|------|------|------|------|------|------|------|------|-----------|-----------|------------|
|                             | Evaporating temperature (°C) |      |      |      |      |      |      |      |      |      |      |           |           |            |
|                             | 15                           | 10   | 5    | 0    | -5   | -10  | -15  | -20  | -25  | -30  | -35  | --40      |           |            |
| 70                          | 3.0                          | 3.0  | 3.0  | 2.9  | 2.9  | 2.8  | 2.5  | 2.1  | 1.7  | 1.4  | 1.1  | 0.9       | TIH-P...2 |            |
|                             | 5.0                          | 5.0  | 4.9  | 4.9  | 4.8  | 4.7  | 4.1  | 3.5  | 2.8  | 2.3  | 1.8  | 1.4       | TIH-P...3 |            |
|                             | 7.0                          | 7.0  | 6.9  | 6.9  | 6.8  | 6.6  | 5.8  | 4.9  | 4.0  | 3.2  | 2.5  | 2.0       | TIH-P...4 |            |
|                             | 10.3                         | 10.2 | 10.2 | 10.1 | 9.9  | 9.7  | 8.5  | 7.1  | 5.8  | 4.7  | 3.7  | 3.0       | TIH-P...5 |            |
|                             | 12.1                         | 12.1 | 12.0 | 11.9 | 11.7 | 11.5 | 10.1 | 8.4  | 6.9  | 5.5  | 4.4  | 3.5       | TIH-P...6 |            |
|                             | 17.2                         | 17.2 | 17.1 | 16.9 | 16.7 | 16.4 | 14.3 | 12.0 | 9.8  | 7.8  | 6.2  | 5.0       | TIH-P...7 |            |
|                             | 19.2                         | 19.2 | 19.1 | 18.9 | 18.6 | 18.3 | 16.0 | 13.4 | 10.9 | 8.7  | 7.0  | 5.6       | TIH-P...8 |            |
|                             | 22.1                         | 22.1 | 21.9 | 21.7 | 21.4 | 21.0 | 18.4 | 15.4 | 12.5 | 10.0 | 8.0  | 6.4       | TIH-P...9 |            |
| 27.5                        | 27.5                         | 27.3 | 27.0 | 26.6 | 26.1 | 22.9 | 19.2 | 15.6 | 12.5 | 10.0 | 8.0  | TIH-P...A |           |            |
| 65                          | 3.1                          | 3.1  | 3.1  | 3.1  | 3.0  | 3.0  | 2.6  | 2.2  | 1.8  | 1.5  | 1.2  | 0.9       | TIH-P...2 |            |
|                             | 5.1                          | 5.1  | 5.1  | 5.1  | 5.1  | 5.0  | 4.4  | 3.7  | 3.0  | 2.4  | 2.0  | 1.6       | TIH-P...3 |            |
|                             | 7.2                          | 7.2  | 7.2  | 7.2  | 7.1  | 7.0  | 6.2  | 5.2  | 4.2  | 3.4  | 2.7  | 2.2       | TIH-P...4 |            |
|                             | 10.5                         | 10.6 | 10.6 | 10.5 | 10.4 | 10.3 | 9.1  | 7.6  | 6.2  | 5.0  | 4.0  | 3.2       | TIH-P...5 |            |
|                             | 12.4                         | 12.5 | 12.5 | 12.4 | 12.3 | 12.1 | 10.7 | 9.0  | 7.4  | 5.9  | 4.8  | 3.8       | TIH-P...6 |            |
|                             | 17.7                         | 17.8 | 17.8 | 17.7 | 17.5 | 17.3 | 15.2 | 12.8 | 10.5 | 8.4  | 6.8  | 5.4       | TIH-P...7 |            |
|                             | 19.7                         | 19.8 | 19.8 | 19.7 | 19.6 | 19.3 | 17.0 | 14.3 | 11.7 | 9.4  | 7.6  | 6.1       | TIH-P...8 |            |
|                             | 22.7                         | 22.8 | 22.8 | 22.7 | 22.4 | 22.1 | 19.5 | 16.4 | 13.4 | 10.8 | 8.7  | 7.0       | TIH-P...9 |            |
| 28.2                        | 28.4                         | 28.4 | 28.2 | 28.0 | 27.6 | 24.3 | 20.5 | 16.7 | 13.5 | 10.8 | 8.7  | TIH-P...A |           |            |
| 60                          | 3.1                          | 3.1  | 3.2  | 3.2  | 3.1  | 3.1  | 2.8  | 2.3  | 1.9  | 1.5  | 1.2  | 1.0       | TIH-P...2 |            |
|                             | 5.1                          | 5.2  | 5.3  | 5.3  | 5.2  | 5.2  | 4.6  | 3.9  | 3.2  | 2.6  | 2.1  | 1.7       | TIH-P...3 |            |
|                             | 7.2                          | 7.3  | 7.4  | 7.4  | 7.3  | 7.3  | 6.4  | 5.4  | 4.5  | 3.6  | 2.9  | 2.4       | TIH-P...4 |            |
|                             | 10.6                         | 10.7 | 10.8 | 10.8 | 10.8 | 10.7 | 9.4  | 8.0  | 6.6  | 5.3  | 4.3  | 3.5       | TIH-P...5 |            |
|                             | 12.5                         | 12.7 | 12.8 | 12.8 | 12.7 | 12.6 | 11.1 | 9.4  | 7.7  | 6.3  | 5.1  | 4.1       | TIH-P...6 |            |
|                             | 17.8                         | 18.0 | 18.2 | 18.2 | 18.1 | 17.9 | 15.9 | 13.4 | 11.0 | 8.9  | 7.2  | 5.8       | TIH-P...7 |            |
|                             | 19.9                         | 20.1 | 20.3 | 20.3 | 20.2 | 20.0 | 17.7 | 15.0 | 12.3 | 10.0 | 8.0  | 6.5       | TIH-P...8 |            |
|                             | 22.8                         | 23.1 | 23.3 | 23.3 | 23.2 | 23.0 | 20.3 | 17.2 | 14.1 | 11.4 | 9.2  | 7.4       | TIH-P...9 |            |
| 28.4                        | 28.8                         | 29.0 | 29.0 | 28.9 | 28.6 | 25.3 | 21.4 | 17.6 | 14.2 | 11.5 | 9.3  | TIH-P...A |           |            |
| 55                          | 3.1                          | 3.1  | 3.2  | 3.2  | 3.2  | 3.2  | 2.8  | 2.4  | 2.0  | 1.6  | 1.3  | 1.1       | TIH-P...2 |            |
|                             | 5.1                          | 5.2  | 5.3  | 5.3  | 5.3  | 5.3  | 4.7  | 4.0  | 3.3  | 2.7  | 2.2  | 1.8       | TIH-P...3 |            |
|                             | 7.1                          | 7.3  | 7.4  | 7.4  | 7.4  | 7.4  | 6.6  | 5.6  | 4.6  | 3.8  | 3.0  | 2.5       | TIH-P...4 |            |
|                             | 10.5                         | 10.7 | 10.9 | 10.9 | 10.9 | 10.9 | 9.7  | 8.2  | 6.8  | 5.5  | 4.5  | 3.6       | TIH-P...5 |            |
|                             | 12.4                         | 12.6 | 12.8 | 12.9 | 12.9 | 12.9 | 11.4 | 9.7  | 8.0  | 6.5  | 5.3  | 4.3       | TIH-P...6 |            |
|                             | 17.6                         | 18.0 | 18.2 | 18.4 | 18.4 | 18.3 | 16.3 | 13.8 | 11.4 | 9.3  | 7.5  | 6.1       | TIH-P...7 |            |
|                             | 19.6                         | 20.1 | 20.4 | 20.5 | 20.5 | 20.4 | 18.2 | 15.4 | 12.7 | 10.3 | 8.4  | 6.8       | TIH-P...8 |            |
|                             | 22.5                         | 23.1 | 23.4 | 23.5 | 23.6 | 23.5 | 20.9 | 17.7 | 14.6 | 11.9 | 9.6  | 7.8       | TIH-P...9 |            |
| 28.1                        | 28.7                         | 29.1 | 29.3 | 29.3 | 29.2 | 26.0 | 22.1 | 18.2 | 14.8 | 12.0 | 9.7  | TIH-P...A |           |            |
| 50                          | 3.0                          | 3.1  | 3.1  | 3.2  | 3.2  | 3.2  | 2.9  | 2.4  | 2.0  | 1.6  | 1.3  | 1.1       | TIH-P...2 |            |
|                             | 4.9                          | 5.1  | 5.2  | 5.3  | 5.3  | 5.3  | 4.8  | 4.1  | 3.4  | 2.7  | 2.2  | 1.8       | TIH-P...3 |            |
|                             | 6.9                          | 7.1  | 7.3  | 7.4  | 7.5  | 7.5  | 6.7  | 5.7  | 4.7  | 3.8  | 3.1  | 2.5       | TIH-P...4 |            |
|                             | 10.2                         | 10.5 | 10.7 | 10.9 | 11.0 | 11.0 | 9.8  | 8.4  | 6.9  | 5.7  | 4.6  | 3.7       | TIH-P...5 |            |
|                             | 12.0                         | 12.4 | 12.7 | 12.9 | 12.9 | 13.0 | 11.6 | 9.9  | 8.2  | 6.7  | 5.4  | 4.4       | TIH-P...6 |            |
|                             | 17.1                         | 17.6 | 18.0 | 18.3 | 18.4 | 18.5 | 16.5 | 14.1 | 11.7 | 9.5  | 7.7  | 6.3       | TIH-P...7 |            |
|                             | 19.0                         | 19.7 | 20.1 | 20.4 | 20.6 | 20.6 | 18.4 | 15.7 | 13.0 | 10.6 | 8.6  | 7.0       | TIH-P...8 |            |
|                             | 21.9                         | 22.6 | 23.1 | 23.4 | 23.6 | 23.6 | 21.1 | 18.0 | 14.9 | 12.2 | 9.9  | 8.0       | TIH-P...9 |            |
| 27.2                        | 28.1                         | 28.8 | 29.2 | 29.4 | 29.4 | 26.3 | 22.4 | 18.6 | 15.2 | 12.3 | 10.0 | TIH-P...A |           |            |
| 40                          | 2.3                          | 2.6  | 2.8  | 2.9  | 3.0  | 3.1  | 3.1  | 2.8  | 2.4  | 2.0  | 1.7  | 1.4       | TIH-P...2 |            |
|                             | 3.9                          | 4.3  | 4.6  | 4.9  | 5.0  | 5.1  | 5.2  | 4.7  | 4.1  | 3.4  | 2.8  | 2.3       | TIH-P...3 |            |
|                             | 5.4                          | 6.0  | 6.5  | 6.8  | 7.0  | 7.2  | 7.3  | 6.6  | 5.7  | 4.7  | 3.9  | 3.2       | TIH-P...4 |            |
|                             | 8.0                          | 8.9  | 9.5  | 10.0 | 10.3 | 10.6 | 10.7 | 9.7  | 8.4  | 7.0  | 5.7  | 4.7       | TIH-P...5 |            |
|                             | 9.4                          | 10.5 | 11.2 | 11.8 | 12.2 | 12.5 | 12.7 | 11.4 | 9.9  | 8.2  | 6.8  | 5.5       | TIH-P...6 |            |
|                             | 13.4                         | 14.9 | 16.0 | 16.8 | 17.4 | 17.8 | 18.0 | 16.3 | 14.0 | 11.7 | 9.6  | 7.9       | TIH-P...7 |            |
|                             | 15.0                         | 16.6 | 17.8 | 18.7 | 19.4 | 19.8 | 20.1 | 18.2 | 15.7 | 13.1 | 10.8 | 8.8       | TIH-P...8 |            |
|                             | 17.2                         | 19.1 | 20.5 | 21.5 | 22.2 | 22.8 | 23.1 | 20.9 | 18.0 | 15.0 | 12.3 | 10.1      | TIH-P...9 |            |
| 21.4                        | 23.7                         | 25.5 | 26.8 | 27.7 | 28.3 | 28.8 | 26.0 | 22.4 | 18.7 | 15.4 | 12.6 | TIH-P...A |           |            |
| 30                          | 1.3                          | 1.8  | 2.2  | 2.5  | 2.6  | 2.8  | 2.9  | 2.7  | 2.3  | 2.0  | 1.6  | 1.3       | TIH-P...2 |            |
|                             | 2.1                          | 3.1  | 3.7  | 4.1  | 4.4  | 4.6  | 4.8  | 4.4  | 3.9  | 3.3  | 2.7  | 2.2       | TIH-P...3 |            |
|                             | 3.0                          | 4.3  | 5.1  | 5.7  | 6.2  | 6.5  | 6.7  | 6.2  | 5.4  | 4.6  | 3.8  | 3.1       | TIH-P...4 |            |
|                             | 4.4                          | 6.3  | 7.5  | 8.4  | 9.1  | 9.6  | 9.9  | 9.1  | 7.9  | 6.7  | 5.6  | 4.6       | TIH-P...5 |            |
|                             | 5.2                          | 7.4  | 8.9  | 10.0 | 10.7 | 11.3 | 11.7 | 10.7 | 9.4  | 7.9  | 6.6  | 5.4       | TIH-P...6 |            |
|                             | 7.4                          | 10.6 | 12.7 | 14.2 | 15.3 | 16.1 | 16.6 | 15.3 | 13.3 | 11.3 | 9.4  | 7.7       | TIH-P...7 |            |
|                             | 8.2                          | 11.8 | 14.1 | 15.8 | 17.0 | 17.9 | 18.6 | 17.1 | 14.9 | 12.6 | 10.4 | 8.6       | TIH-P...8 |            |
|                             | 9.4                          | 13.6 | 16.2 | 18.1 | 19.5 | 20.6 | 21.3 | 19.6 | 17.1 | 14.4 | 12.0 | 9.9       | TIH-P...9 |            |
| 11.8                        | 16.9                         | 20.2 | 22.6 | 24.3 | 25.6 | 26.6 | 24.4 | 21.3 | 18.0 | 14.9 | 12.3 | TIH-P...A |           |            |